

# The Mining Journal AND ATMOSPHERIC RAILWAY GAZETTE,

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

NO. 593.—VOL. XVII.

LONDON, SATURDAY, JANUARY 2, 1847.

**TO BE SOLD**, a few shares in the following MINES, all calls paid up:—WHEAL MARTHA, WHEAL ADAMS, and NANT-Y-BEYN.

—Apply to Mr. Dyson, 10, Austinfriars.

**MINING MATERIALS FOR SALE, BY PRIVATE CONTRACT**, either in One Lot, with Sett of Wheal St. Cleer Mine, in the parish of St. Cleer, or may be divided to suit purchasers, the following

## VALUABLE MINE MATERIALS:

A single-acting PUMPING STEAM-ENGINE, cylinder 30 inches diameter, 9 feet stroke, equal beam, with 7-ton boiler, cisterns, &c., &c., complete, in excellent condition, being nearly new.

27 6-feet 10-inch pumps  
3 11-feet 10-inch matching pieces  
6 9-feet 7-inch pumps  
1 15-feet 9-inch working barrel  
1 10-feet 9-inch ditto  
1 12-feet 6-inch ditto  
1 3-feet 10-inch slack-floor piece

1 4-feet 6-inch slack-floor piece  
1 11-feet 11-inch plunger piece, with case  
Stufing-box and gland piece, tap-door  
piece, and windbox to match  
1 9-feet 10-inch windbox  
2 6-feet 7-inch ditto

About 40 fathoms of 8-inch main rod, and about 10 fathoms of 7-inch ditto; 6 set of rod plates, rod pins, bucket prongs, and hoops; about 25 fathoms of 14-inch round iron bucket rods; 10 fathoms of 14-inch ditto; iron set-offs, staples and glands, capstan, shears, balance-hob, horse-whim, and shaft tackle, &c.

About 60 fathoms of 12-inch capstan rope; 50 fathoms of 7-inch ditto; 70 fathoms of 5½-inch ditto, with a quantity of small ditto; 2 cwt. of 5-inch gaskets, 1 cwt. of hemp, 4-inch and 4-inch chain, horse-whim kibbles, winze ditto, 36-gallon water-barrel, ladders, air-pipes, ladders, cisterns, and a quantity of new and old timber, carpenter's bench, miner's chest, &c.; 2 smith's bellows, 36 and 30 inches; anvil, vice, a set of screws, tape-pins, smith's house, screwing stock, smith and miner's tools, blower and gad still, and a quantity of new and old iron, count-house furniture, &c.

For view, apply to Capt. Theophilus Michell, on the mine; and for further particulars, to Mr. W. Rendle, the purser, 15, Octagon, Plymouth.

## STEAM-ENGINE AND OTHER SPARE MATERIALS

FOR SALE, BY PRIVATE CONTRACT, at TRETOIL MINE—a 21-inch cylinder PUMPING-ENGINE, 9-feet stroke in the cylinder and 7-feet in the shaft; 4 1½-inch pumps, working barrel, windbox, and doorpieces; 4 9-inch pumps, 1 6-inch windbox; about 15 fathoms of 7-inch pumps, without flanges; 1 6-inch plunger-piece, complete, and sundry other things.—Apply to Mr. Henry Thomas (secretary), 8, George-yard, Lombard-street, London; Mr. Geo. Geach, Bodmin; or Capt. Henry Williams, on the mine.

Dated Dec. 22, 1846.

## VALUABLE SLATE QUARRY AND COPPER MINES

IN NORTH WALES.—To be DISPOSED of, by PRIVATE CONTRACT, that valuable BLUE SLATE QUARRY, called and known by the name of HAFOTTY, situated in the parish of Llanfrothen, in the county of Monmouthshire, within five miles of Port Madoc, and two of the Festiniog Railway, which leads to that flourishing port. This quarry consists of an abundance of slates of the best description, which can be seen to any purpose, and is free from rabbish. The proprietors have a take-note or grant for three years, and to have a lease for 30 years at any time during the existence of the take-note—the liberty being 20 acres. Also, on the same land, and under the same lease, a very desirable COPPER MINING SETT, with good prospects of raising large quantities of valuable ores. A turnpike road is immediately to be made from Festiniog to Llanfrothen, which will facilitate the transit of the slate from the quarry to the navigable river of Conway, and also join the Chester and Holyhead Railway at Conway. For further particulars, apply to Mr. W. Roberts, Quarrymen's Arms, Clewby-Bont, Llanddewi-Bont, near Carnarvon, North Wales. December 24, 1846.

## IRONSTONE AND COAL-FIELD IN AYRSHIRE TO LET.

The extensive FIELD of MINERALS, in the property of KERSE, or LITTLE MIL, part of the ESTATE of AUCHINCRIEVE, will be LET, ON LEASE, for such period as may be agreed upon. The lands contain black-band ironstone, supposed to be of a superior quality, and both gas and other coal; they adjoin, and in part march with, the mineral field, now finally let to Messrs. Houldsworth, upon the Crichtonhill estate, near to Dalmenyton. The lands extend to about 3000 acres, and are about to be opened up by a branch railway, running through the whole estate, and joining the Auchincleek Branch of Ayr Railway Company at Joppa, and the Ayr and Galloway line of railway at Smithton, about eight miles from the sea port of Ayr.

Offers will be received, and further information given, on application to McClelland and M'Kemie, accountants, 195, Ingram-street, Glasgow; David Campbell, Esq., Mount Hamilton, near Ayr; or Messrs. Mitchell, Henderson, and Mitchell, writers, Glasgow.

## TO BE LET, THE PARK HALL MINES, DEAN FOREST,

GLoucestershire—containing ONE MILLION TONS OF COAL, and ONE MILLION TONS OF RICH IRON ORE, which being calcareous, smelt well with argillaceous ironstone, and may be delivered in large quantities to the Staffordshire, Shropshire, and Welsh iron-works, at a price far below the cost of local ironstones. The mines are drainable by level, and can be opened at a trifling expense; and, were blast-furnaces erected, their produce might be smelted on the spot into excellent iron.—Apply (post-paid) to Henry H. Fryer, Esq., solicitor, Coleford, Gloucestershire.

## STEAM TUG—TO ENGINEERS, SHIPBUILDERS, AND OTHERS.

TENDERS will be received, on or before the 20th January next, for the SUPPLYING of a STEAM TUG, completed fit for sea, to draw not more than 4½ feet of water, and furnished with two engines, of 25-horse power each, and two sumpent boilers. Tenders to state separately the cost of the machinery and the hull, and the cost of an oak-built or an iron hull. Tenders, accompanied by full specifications, to be addressed to Mr. F. Camp, Barnstaple, Devon, secretary to the Taw and Tarride Steam Tug Company.—Dated, December 29, 1846.

WANTED, for a Colliery, 80 fathoms deep, a powerful HIGH-PRESSURE STEAM-ENGINE, in good condition—not less than 45-inch cylinder, with suitable boilers, pumps, &c., complete—to pump water and raise coal.—Apply to Mr. John Calvert, Newbridge, Cardiff, Glamorgan.

## GLENKENS LEAD AND COPPER MINES,

KIRKCUDBRIGHTSHIRE.—In consequence of MINERALS, of considerable value, having been found on the ESTATES in which the GLENKENS MINES are situated, an Act of Parliament has been obtained, to enable the trustees to GRANT MINERAL LEASES. These mines are situated in the centre of a mineral country, and in the vicinity of the flourishing lead works of Carlisle, Lead Hills, the Newton Stewart, and Heston Island Copper Mines, the Kirkcudbrightshire Mining Company's works, and others in that part of Scotland.

The proprietor has been, for the last two years, exploring and opening the ground, and five promising lodes have been proved, which are now being opened and extended by Cornish miners. There being every prospect of a most satisfactory result at an early period, as appears from the reports of the several mine agents who have inspected the lands, and the success of the captain now superintending the works, a company is being formed, to give the mines a fair trial, on the principle of the Cost-book System, by dividing the interests into 1000 shares, of which some few still remain unappropriated.

Plans of the sett, comprising about 1600 acres, and the several reports, may be seen, and every information obtained, at the offices of Messrs. Bullock and Luscombe, No. 35, Lincoln's Inn-fields, to whom applications for shares must be made.

## TO CAPITALISTS.—CARMARTHENSHIRE AND GLAMORGANSHIRE, SOUTH WALES.

THE AGENT of an extensive estate, with the attention of Ironmongers, Colliers, Manufacturers, Farmers, and Canalists in general, to this important estate, is prepared to ENTER into ARRANGEMENTS with respectable PARTIES for the LEASING, on long terms, of VARIOUS DESCRIPTIONS of PROPERTY, now the object of public attention—Anthracite and Bituminous Coal and Glim, Ironstone, Limestone, Marble, Flints, and other quarries—Fire Clay and Brick Earth, and for erecting, and near, ship-building and far-ranging commercial towns, seaport, and dock, manufacturing, and other works, joining a railroad and canal, leading, by their main trunks and branches, to three seaports—water-power is almost general.—SITUATIONS for RURAL and MARINE RESIDENCES in the most beautiful parts of the country, commanding views of Swansea and Carmarthen Bays, and the Black Mountain, with good roads, cheap markets, and daily communication with Brecon, Gloucester, and the metropolis.

The estate is situated in 24 parishes, offering, in every variety of soil and scenery, numerous objects of interest to the geologist, the sportsman, and the admirer of the picturesque. As an inducement to capitalists to embark in such agricultural improvements, as draining, planting, erections of proper homesteads, &c., which now so deservedly occupy public attention, LEASES of NINETY-NINE YEARS will be granted for these purposes. Cheap food, labour, fuel, and raw material of every description, will give the manufacturer an advantage over every other part of Great Britain; while the large and still increasing trade in coal affords an intercourse with all parts of the world, for importing the produce of their localities at cheap back freights, and for forwarding to their destination the manufactured articles. This more particularly applies to those undertakings where the consumption of coal forms a principal ingredient.

The South Wales Railway will pass through the town, touching the three seaports, and going over a large proportion of the estate on the sea-coast; while the contemplated inland railways will bring the collieries, ironstone, limestone, and stone quarries, within an easy distance of the agricultural counties of Hereford and Worcester, and the great chain of railway communication, connecting Birmingham, Liverpool, Manchester, and all the important manufacturing districts of England.

For further particulars apply to F. L. Brown, solicitor, Llanelli; John Williams, solicitor, 1, Vernon-buildings, Gray's Inn, London; Messrs. Brooks and Green, estate agents, 28, Old Bond-street, London; Mr. John Farram, estate agent, 29, St. James's-street, Liverpool; Alfred Henderson, solicitor, Albion Chambers, Bristol; Messrs. Horrold and Harrison, solicitors, Leeds; and Mr. G. H. Belas, 66, Cauden-street, Dublin.

Just published, Part I., COMBUSTION OF COAL, CHEMICALLY & PRACTICALLY CONSIDERED. With coloured plates.

By CHARLES WYKE WILLIAMS, Esq.

London: Sampkin, Marshall, & Co., and J. Weale—Birmingham: Wrightson & Webb.

## METROPOLITAN IRON AND STEEL COMPANY.

(Provisionally Registered, pursuant to 7 and 8 Vic. c. 110.)

Capital £300,000, in 30,000 shares of £10 each.—Deposit 1s. per share.

MANAGING DIRECTORS.

CHARLES CHILTON, Esq., Steam Mills, Old-street, London

THOMAS KEARSLEY, Esq., merchant, Southampton-buildings

GEORGE SCOTT, Esq., engineer, Bowes-street

HANNIBAL GARDNER, Esq., Castle-street, Holborn.

(With power to add to their number.)

BANKERS.

London and Westminster Banking Company.

SOLICITORS.

Goddard and Eyre, No. 101, Wood-street, Cheapside.

ARCHITECT AND SURVEYOR.

William Sower, Esq., No. 10, Union-place, Lambeth-road.

SECRETARY—James Evans.

A company has been formed for the MANUFACTURE OF IRON AND STEEL (from cast, scrap, and all descriptions of old refuse iron), which shall be of a superior quality to any hitherto produced in the mining districts.—The objects of the company are fully explained in the prospectus.

Applications for shares, in the subjoined form, to be made to Messrs. Pritchett and Mundy, sharebrokers, No. 68, Broad-street; Messrs. W. Bushell and Co., sharebrokers, 17, Change-alley, Cornhill; the Western Railway Exchange, 127, Regent-street; Messrs. W. and H. Davies, sharebrokers, Liverpool; Mr. Joseph Fernyhough, sharebroker, Manchester; Messrs. Timmins and Lane, sharebrokers, Birmingham; Mr. James Renton, sharebroker, Edinburgh; Mr. R. C. Meikle, sharebroker, Glasgow; Mr. John Cooper, sharebroker, Leeds; Messrs. Goddard and Eyre, solicitors to the company, 101, Wood-street, Cheapside, or to the secretary, at the offices, 30, Moorgate-street.

12

## WHEAL CURTIS COPPER MINING COMPANY, IN THE PARISH OF CROWAN, CORNWALL.

Capital £1000, in 6000 shares of £4 each.

PROVISIONAL DIRECTORS.

GEORGE PILKINGTON, Esq., C.E., late Captain Royal Engineers, Milner-square

GEORGE EVANS, Esq., C.E., Theberne-street, Gibson-square

MARTIN STAPLEY, Esq., Homerton

CHARLES DEANE, Esq., Upper Seymour-street, Portman-square

WILLIAM GIBBS, Esq., Camberwell

BANKERS—Messrs. Cunliffe, Brooks, and Co., Lombard-street.

SOLICITOR—Henry W. Bull, Esq., 28, Ely-place, Holborn.

SECRETARY—George A. Jacob, Esq.

The directors have great satisfaction in informing their proprietors, that the prospects of the adventure are exceedingly favourable. The purchase of the new and splendid engine, of the Hallenbeak Mine, has been completed; and, by the payment of cash down amounting to nearly £2000, and the admirable manner in which the purchase of materials has been made by their purser, a saving of £1500 has been effected to the credit of the company.

The directors have incurred an expenditure in all of about £2000, of which about 500 is only chargeable to the preliminary expenses of advertisements, printing law charges, &c., &c. The purchase of the entire interest in the mine has been effected—the engine and engine-house erected, the necessary materials for fully developing the rich resources of six promising lodes of the mine, the payment of the promoter for his trouble and expenses in forming the company, and the preliminary expenses of working, have all been defrayed at a cost within the above sum.

The above amount of £2000, includes the sum of £1500, the first deposit on 1000 shares, which have been allotted to the promoter, in satisfaction of all his claims for his interest in the mine, and in the formation of the company, on which shares the said deposit is considered to be paid—the said shares being, however, liable to all future calls. The full accounts, which are now being addited, will be completed in a few days, and immediately lie at the offices for the inspection of any of the shareholders. The directors are holders of 2000 shares in the undertaking, and offer this guarantee of their good faith to the proprietors. The engine will be in full work by the 15th of January, and the mine forked, and ore on the ground by the 1st of March, until which no call will be made on the shares.

The directors have special pleasure also in announcing the discovery of a most promising lode, which will be worked by sail-rolls, connected with the same engine, and which is named the Charlotte lode: this discovery doubles the value of the mine.

The resignation of the secretary, E. Mills, Esq., has been accepted, and G. A. Jacob, Esq., elected to the office, to whom all communications are to be addressed. Capt. Crase, an experienced miner, and Mr. James Fagan—the former as captain, and the latter as purser and manager, have also been unanimously elected. In conclusion, the directors rely upon their honest intention to work the mine, for the benefit of the proprietor, in the most economical and prudent, yet energetic manner, for the approval of their constituents at the first general meeting, to be called in August, 1847. The deed of settlement is being settled by council under the direction of their solicitor, H. W. Bull, Esq., and will be ready in a few days for signature. As applications for shares are being daily received, the directors take this opportunity of informing the public, that the books of allotment were closed on the 14th inst., and that parties desirous of procuring shares, must apply to their respective brokers. By order, G. A. JACOB, Secretary.

Gresham-rooms, Basinghall-street, Dec. 24, 1846.

## GREATER SOUTH TOLGUS COPPER AND TIN MINING COMPANY.—(ON THE COST-BOOK SYSTEM.)

Capital £4500, in 1500 shares of £3 each.—Deposit £2 per share—the remainder, as required, in calls not exceeding 10s. each per share.

This valuable mining property, held under a lease for 21 years, at the reduced dues of 1½d. per ton, is situated in the parish of Redruth, in the county of Cornwall, and immediately adjoins, on the south, the well-known Great Wheal Tolgus Mine, which realised, during its late workings, a profit of £280,000—the greater part of which was derived from the various levels, from the 80 ft. to 110 fms. down, and from a length of ground within 100 fms. east and west of the great cross-course.

In this set there are eight known lodes, three of which have proved very productive, as far as they have been worked upon—£2000 worth of rich copper ore having been raised therewith in a short time. The other five lodes are in virgin ground, below the adit level. None of the lodes in this set have been yet so far wrought upon as to intersect the great cross-course—so which is one of the leading features that recommends the prosecution of this mine so highly desirable.

The report of the mining agents in the prospectus—emanating from men of acknowledged celebrity and most extensive practical knowledge and information—is highly interesting, and fully justifies the conclusion, that, under judicious management, a liberal profit will be the result of a vigorous prosecution of this work, and as well render the detail of further particulars unnecessary.

The individual liability of shareholders in this company is limited to the amount and number of shares respectively held; and any proprietor may, at any time, determine his or her liability by a relinquishment of their respective shares.

Each applicant for shares, of good repute, will immediately receive a letter of acceptance for the whole amount of shares required; but, if the deposit upon such shares be not promptly paid by the day prescribed in the letter of allotment, such shares will be granted to the next unpaid applicant.

Applications for shares, prospectuses, &c., to be made to the secretaries of the company, at their offices, 25, Castle-street, Liverpool; or to the office of the Mining Journal, 26, Fleet-street, London. JOHN PAINTER & CO., Secretaries pro tem.

35, Castle-street, Liverpool, Dec. 4, 1846.

Applications for shares to be made to the secretaries of the company, at their offices, 25, Castle-street, Liverpool; or at the office of the Mining Journal, 26, Fleet-street, London; or to Messrs. Callow and Fovorham, brokers, 4, Finsbury-lane, Cornhill, London, where prospectuses may be obtained.

2

8. In consequence of the limited number of shares remaining, no further application will be received after the 12th of January, 1847.

H. R. RYAN, Secretary.

10. W. H. BROWN, Secretary.

11. J. H. HARRIS, Secretary.

12. J. H. HARRIS, Secretary.

13. J. H. HARRIS, Secretary.

## Mining Correspondence.

## ENGLISH MINES.

**ALBERT CONSOLS.**—These mines are situated in the parish of St. Stephen's, in Brawne, in the county of Cornwall, and immediately adjoins the parish of St. Dennis—being about half-a-mile west of the Victoria Tin Mines, which are at this time in great repute, and of great promise, and whose lodes pass through these sets. There are already discovered three distinct lodes, each being from 4 to 5 ft. wide, underlying north, producing excellent tinstuff—some rocks from which weigh from 1 to 2 cwt. each, worth 5 cwt. of tin per 100 sacks, and which are now to be seen on the mine. There are also several hundred kibbles of tinstuff raised, ready to be returned as soon as stamps are erected. The lodes were discovered by a party who are engaged in the china-clay works; and clay being their object, and knowing little of tin, they took scarce any notice of it. There could be an engine erected, and the engine-shaft sunk to the 20 fm. level, and levels extended, and the mines brought into a profitable state of working, for about 1000 ft., with about an additional 200 ft. expended in the erection of stamping mills, the cutting of leats, &c. The lodes have been discovered to run several hundreds of fathoms in these sets; and, from their present appearances, I have no hesitation in saying, that, if prosecuted in a spirited manner, they will take their place amongst the first-class dividend-paying mines. I cannot help congratulating you upon the possession of so valuable a speculation.—J. CHYNOWETH: Dec. 30.

**BARRISTOWN.**—We intersected this week in the cross-cut, south of 28 fm. level, a branch of lead about 3 in. wide. The lode in 18 fm. level east of flat-rod shaft is very much improved, producing 1/2 ton of ore per fm. The lode in the 12 fm. level east of flat-rod shaft is much the same, producing about three-quarters ton per fm. There is nothing discovered in 24 fm. cross-cut, north of engine-shaft; the pitches look well. Nothing new in any other part since my last.—T. ANGOVE: Dec. 26.

**BEDFORD UNITED.**—At Wheal Marquis, the lode in the 80 fm. level east, is 18 in. wide, good work. In the 70 fm. level east, the lode is a little improved, being 18 in. wide, producing good saving work, a very kindly lode. There has been no lode taken down in the 58 fm. level east. At Wheal Tavistock, the lode in the 47 fm. level east is much the same as last reported; and in this level west, the lode is 18 in. wide, producing good stones of ore. The lode in the 38 fm. level east, is 18 in. wide, composed of spar and mundic, with good stones of ore in places. The lode in the south engine-shaft is without important alteration. In the adit level east, the lode is 18 in. wide, very kindly.—JAMES PHILLIPS: Dec. 29.

**CALLINGTON.**—In the 112 fm. level, driving south, the lode has a more productive appearance, producing silver-lead ores; in the north end the lode has not been taken down. In the 100 fm. level, driving north, the lode is again disordered by hard bar of ground; in the south end we are opening tribute ground; in the winze, sinking below this level, we have not cut into the lode, fearing an increase of water. In the 90 fm. level no ground has been driven since last report, owing to the accumulation of stuff from the tributaries—the winding engine being idle for some days whilst the stuff was in course of securing. At the north mine, in the 100 fm. level, both north and south, we are opening ground that will work at a moderate tribute. In the 90 fm. level south the ground is very soft and congenial—the back will work at a low figure; in the north end the lode is poor. In the 80 and 70 fm. levels the lode continues to produce silver-lead ores; the tribute pitches, on the whole, are looking favourable. The severe weather we have had, has caused a delay in the dressing department—consequently, our sampling will not be quite so early as usual.—J. T. PHILLIPS: Dec. 28.

**COOK'S KITCHEN.**—In Chapple's lode, at the engine-shaft, we are still engaged in cutting a plat at the 180 fm. level. In the 180 fm. level west, the part of the lode, on which we are driving, is 3 ft. wide, worth about 10 ft. per fm. The winze, from the 170 to the 180 fm. level, west of engine-shaft, is holed, which has laid open a good piece of tin ground for working on tribute. The winze, from the 160 to the 170 fm. level, west of the engine-shaft, is not yet holed; but we expect to do so in course of the ensuing fortnight, when we shall be able to work to greater advantage the valuable tin ground, through which it is sunk; the winze and the rise continue of about the same value as when last reported—viz.: worth about 20 ft. per fm. The lode in the winze, sinking under the 148 fm. level, west of engine-shaft, is about 3 ft. wide, and worth 8 ft. per fm.; in the 148 fm. level, east of engine-shaft, the lode is worth 8 ft. per fm. The lode in new east shaft, sinking below the 140 fm. level, is poor. In the 160 fm. level west, on the south part of Chapple's lode, the lode is worth about 10 ft. per fm. Eudy's lode, in the 92 fm. level, west of new east shaft, is poor. We have again met with a misfortune, by breaking one of the axles of the steam stamp—it is one belonging to the old part of the machine, which was put in order by the previous management: this will throw us back somewhat; but we shall, notwithstanding, on Friday next, send to the smelting-house 12 tons of tin, and, but for the breakage, should have got about 15 tons. The mine, on the whole, is looking better; and our sales of tin will, for the future, be larger than they have been.—JOSCEPH VIVIAN: Dec. 28.

**CUBERT SILVER-LEAD.**—The sumpmen will be engaged the whole of January month in cutting whim-plat at the 35 fm. level, and also cutting and sinking for cistern, bearers, &c., &c. At the 25 fm. level, going west, we have a very promising level—lode 18 in. wide, and will produce 1 ton per fm.; at this level, going east, the lode of late has much improved—being 2 ft. wide, yielding rich stones of lead. In the 15 fm. level, driving west, the lode is 1 ft. wide, and still passing through ground which will sit at a moderate tribute—say, 3 ft. tribute; the eastern end, at this level, is a large, rich-looking gossan, producing occasionally good work for lead. We have this day made the pay for November, and held the setting for January, 1847. We have set 12 pitches, employing 88 men, varying from 4d. to 5d. per ton. Our computed 55 tons of silver-lead ores were sold to Messrs. Walker, Parker, and Co., for 12d. 1s. 6d. per ton on the 19th inst.; it weighed 55 tons (21 cwt.) 3 cwt., and is shipped at the gunnel.—RICHARD ROWE.

**EAST TAMAR CONSOLS.**—At Whitson, the ground in Hitchins's shaft still continues hard for sinking. The lode in the 54 fm. level north is 20 in. wide, fluor-spar, and silver-lead ore; the lode in the 54 fm. level south is 2 ft. wide, north of a good quality. The lode in the 46 fm. level south is 1 ft. wide, good stones of ore. At Furzehill, the lode in Harrison's shaft is 2 ft. wide, a very promising lode. The lode in the 38 fm. level north is 18 in. wide, saving work; the lode in the 28 fm. south is 2 ft. wide, work of a good quality. In the 30 fm. level south, the lode is 2 ft. wide, a very kindly lode.—B. ROBINS: Dec. 29.

**GREAT MICHELL CONSOLS.**—In the 22 fm. level east, the lode is chiefly gossan and spar, with spots of copper ore; in the 22 west, the lode has a very promising appearance, containing gossan, spar, and mundic, with some good black and yellow copper ore. The engine-shaft is down 4 fms. 2 ft. below the 22 fm. level.—T. RICHARDS: Dec. 29.

**GUNNIS LAKE.**—At Chilsworthy, the lode in Bailey's engine-shaft is 4 ft. wide, composed of gossan, peat, spar, and ore, very kindly. There is no alteration in the 12 fm. level east and west since my last.—W. RICHARDS: Dec. 29.

**HAWKMOOR.**—The lode in the 15 fm. level, east of Hitchins's shaft, contains 3 ft. wide, producing stones of ore in places.—P. RICHARDS: Dec. 29.

**HERDFOOT.**—We have been delayed in our cross-cut at the 72, as that we have not yet cut the lode, which we shall do in the course of next week—indications are very favourable. We have also been delayed in our driving by the frost, and by the breaking of the cog-wheel of the crushing machine, so that our parcel of ore is not ready. I have set two pitches in the back of the 62, 1/2 ft. of the boundary line, between Rowe's land and Botelot manor, in about 1/2 ft. in the 12. No other alteration of importance, since I wrote you.

**HOLMBUSH.**—There is nothing new to report on this week respecting the shaftmen—they are still going on with their contracts. The lode in the 120 fm. level, west of the great cross-course, is 20 in. wide, and worth 40 ft. per fm.; in driving north of this level, we have communicated with the 120 fm. level, south from the winze. The 110 fm. level, west of the lead lode, is for the present suspended, and the men set to rise above this level, on the flockan part of the lead lode, to unwater the bottom of the 110 fm. level, and for ventilation; we have cut through the main part of the lead lode at the 110 fm. level, and find it to be 14 in. wide, composed of fluor-spar, white spar, and fine stones of lead, worth 6 ft. per fm.; we think it a very promising lode indeed, and have set to drive south on it at 4 ft. per fm.; we have not sufficient air to drive north on it at the same time, until the communication is made to the 100. The lode in the winze, sinking below the 100 fm. level, between the great cross-course and the slide, is 14 in. wide, and worth 12 ft. per fm.; the lode in the 100 fm. level south, is 18 in. wide, composed of flockan, spar, and stones of lead. The lead pitches, on the whole, are much the same as last reported on. Some day next week, we hope to have 12 tons of lead for sale; last Friday, being Christmas day, the copper ore samplers thought proper to postpone the sampling until next Friday, January 1.—W. LEAN: Dec. 29.

**KIRKCUDBRIGHTSHIRE.**—Having cut the platt at the bottom of Stewart's shaft, we shall now commence driving east and west on the lode at the 30 fm. level, and, in the meantime, expect to finish fixing the pitwork in course of next week. The 20 fm. level, driving east of this shaft, having been filled up with stuff, the whim, not being able to discharge it and keep the water, has for the present to be suspended; the same may be said of the winze sinking under this level. The stopes in roof of same level have greatly improved since my last, both east and west of shaft, worth at present 6 ft. per fm. for lead. The lode in the adit end is without much alteration. Our dressers are still delayed in their business by hard frost. In our erections we are progressing as fast as possible.—JOHN BUZZO: Dec. 26.

**LANTVET CONSOLS.**—The leader part of the lode, in the 90 fm. level east, is 2 ft. wide, a good grey lode; ditto west, the leader part of the lode is 18 in. wide, producing good stones of ore. In the 40 fm. level east the flockan, or south part of the lode, on which we are present driving, is 16 in. wide, producing a small quantity of ore, but not worth saving. In the winze, sinking

below the 90 fm. level, on the north part of the lode, the leader part is 2 ft. wide, good saving work. In the winze, sinking below the 90 fm. level west, the lode is 18 in. wide, producing good saving work—this is on the leader part south, and at present very kindly.—H. WILLIAMS.

**LEWIS.**—The lode in the 60 fm. level, east of Wheal Nutt engine-shaft, is 2 ft. wide, worth 6 ft. per fm. for tin. The lode in the 60 fm. level end east is 6 ft. wide, worth 40 ft. per fm. for tin; we are continuing the cross-cut south at the 50, west of sump whm shaft, ground hard. The lode in the 40 fm. level end east is 2 ft. wide, worth 10 ft. per fm. for tin. Tin shaft we have suspended, in consequence of more water: than we keep with barrels. The lode in the winze, sinking under the 40 fm. level, on the south branch, is 8 in. wide, worth 5 ft. per fm. for tin. The lode in the 30 fm. level end east is 2 ft. wide, worth 5 ft. per fm. for tin; the lode in the 30 fm. level end west, on south branch, is 10 in. wide, set at 11 ft. in the 12 for saving the tin. Our present prospects are more favourable than ever.—S. S. NOEL: Dec. 26.

**LOSTWITHIEL CONSOLS.**—On the caunter lode (No. 7) an adit has been extended a considerable distance; it has produced gossan and spar, with spots of copper, mundic, and portions of sulphate of barytes. As far as I could see and learn, No. 3 appears to be the main lode; it runs through the middle of the set, and has been opened on near the engine-shaft for 6 or 7 fms. in length, where it is a large lode of fine natured gossan, and I was shown some spots of copper pyrites that were raised from it. No. 4 lode has been seen about 30 fms. south from No. 3, and No. 5 about 10 fms. still further south. The workings on the backs of the two latter lodes have been filled in, but there is still a pile of very pretty gossan to be seen from No. 5 lode. A cross-cut has been commenced on a large quartz cross-course, nearly opposite the engine-shaft, which will intersect Nos. 4 and 5 lodes about 7 fms. below surface; this I advise should be extended to the lodes, as it will partially develop their character, and show whether they are worthy of trial at a deeper level. The engine-shaft has been fixed about 250 fms. from the eastern boundary, and 27 fms. north from the back of No. 3 lode, with the design of the lode dipping into the shaft, about 70 fms. below the surface; the shaft is now 13 fms. deep, with a horse-whim erected on it to draw the water and staff; they will, probably, be enabled to sink a few fathoms deeper by this means, until a steam-engine can be got ready, which circumstances seem to warrant, and require with all possible expedition, as I do not think it probable you can sink far with the present mode of drainage. Having surveyed the locality, and made various inquiries to ascertain the probable quantity of water the engine would have to draw, I find that an engine of 36-in. cylinder would drain the mine to the depth of from 90 fms. to 100 fms. The engine (with the cylinder over the shaft, similar to that at Lamheroe) has been found extremely efficient and economical to work, and costs less to erect—I would, therefore, recommend one of that description.—J. B. CLYMO: Dec. 30.

**PENTUAN WHEAL MARY.**—At the adit end south-west, the ground through which we have driven, is much the same as last reported. Since my last, we have sunk on the middle lode; and I am happy to inform you, that the lode is improved both in size and quality, being from 6 to 8 ft. wide, composed of a beautiful gossan, with fine pieces of copper ore—a very promising lode indeed, and, from the indications, highly encouraging. Since the above was written, I have been informed that the lode is still further improved.—JAMES CHYNOWETH: Dec. 29.

**SILVER VALLEY.**—The tin lode, in the 40 fm. level east, is 2 ft. wide, and is poor for tin at present, but has a very promising appearance; in the western level there has been but a little of the lode taken down, and without alteration. The lode in the 30 fm. level west, is divided by a horse of killas; the north branch is small, composed chiefly of spar and mundic, and the south or main part is 20 in. wide, producing a little tin-work; the pitches and stopes are without any important alteration since last report. At the silver mine, in the stopes, in the back of the 30 fm. level west, the lode varies in size from 4 in. to 16 in. in width, two-thirds of which we are saving for work, and selecting some good stones of grey and ruby silver; in the eastern stopes, in the back of this level, the lode is 2 ft. 8 in. composed of flockan and carbonate of iron, with occasional spots of lead; and, altogether, it presents very favourable indications. In the 20 fm. level west, the lode has improved in appearance since we commenced driving; it is about 20 in. wide, composed of flockan, with carbonate of iron and spots of silver-lead ore. The lode in the 10 fm. level east; 1 ft. wide, composed chiefly of flockan and quartz. At Wheal Sisters, in the shallow level east, the lode is 2 ft. wide, with a branch of carbonate of iron and mundic in the south part, containing some good work of sulphure, and a little native silver. At present the silver lode, upon the whole, looks tolerably well.—S. RICHARDS: Dec. 28.

**SOUTH MARIA.**—Having been recently appointed the managing agent of this mine, I beg to inform the distant shareholders, that the dam, or vein, across the river Tamar, is in course of repair, which we hope to complete this week, so as to enable us to set the machinery to work, when it is intended, on the shaft being drained, to resume sinking; the shaft is now 12 fms. under the adit level, and 23 fms. from the surface. This sett is about 450 fms. long east and west on the course of the lodes, and about the same in width, and contains five distinct lodes, running east and west—three of them south of the shaft, varying in size from 2 ft. to 5 ft. wide; the greatest depth sunk on either of these is 15 ft., and are of a very promising nature, composed of gossan, interspersed with spots of yellow ore, and underlying north; the two other lodes are north of the shaft—the extreme north of which is from 4 ft. to 6 ft. wide, producing some good tinstuff on the back, but more than probable will produce copper in depth. I have not seen a more promising lode than this in the neighbourhood—Wheal Maria excepted. There has not been sufficient done on this lode to ascertain its underlying. It is intended to drive north from the shaft to the two last-named lodes at a depth of 30 fms., and to the three former at 40 fms. deep—the wheel being supposed to be of sufficient power to draw the mine 50 fms. deep under the adit. Several branches have already been discovered in sinking the shaft, which produced some pretty yellow ore. There has been a caunter lode cut in the wheel-pit, and, from its course, will come in contact with the other lodes near the engine-shaft, where we anticipate some good deposits will be found. The large cross-course, which has been sunk on about 5 fms., and from which some good lead ore have been taken, will fall in with the caunter in this sett. This sett has Devon Great Consols, or the Maria sett, for its boundary east, and Wheal Williams north; the five named east and west lodes are visible in the bed of the river Tamar, running from the Great Maria into South Maria sett.—G. FRANCIS: Dec. 30.

**SOUTH TAMAR UNITED.**—The weather still continues very unfavourable for the surface work, so that the masons have not been able to get on with the buildings so fast as I could wish, for the last week past. The men in the adit level have cleared and secured 53 fms. north from the adit shaft.—B. ROBINS: Dec. 29.

**TRELEIGH CONSOLS.**—Christo's shaft, below the 100 fm. level, will require 80 ft. to make it 10 fms. 2 ft. below that level, we have 7 fms. to sink to make it this depth—this is in the country; in the 100, east of Christo's shaft, the lode is 24 ft. wide, worth about the same as last week (10 ft. per fm.); but we think it will be soon better, as we are near the junction of both branches; the north of the shaft—the extreme north of which is from 4 ft. to 6 ft. wide, producing some good tinstuff on the back, but more than probable will produce copper in depth. I have not seen a more promising lode than this in the neighbourhood—Wheal Maria excepted. There has not been sufficient done on this lode to ascertain its underlying. It is intended to drive north from the shaft to the two last-named lodes at a depth of 30 fms., and to the three former at 40 fms. deep—the wheel being supposed to be of sufficient power to draw the mine 50 fms. deep under the adit. Several branches have already been discovered in sinking the shaft, which produced some pretty yellow ore. There has been a caunter lode cut in the wheel-pit, and, from its course, will come in contact with the other lodes near the engine-shaft, where we anticipate some good deposits will be found. The large cross-course, which has been sunk on about 5 fms., and from which some good lead ore have been taken, will fall in with the caunter in this sett. This sett has Devon Great Consols, or the Maria sett, for its boundary east, and Wheal Williams north; the five named east and west lodes are visible in the bed of the river Tamar, running from the Great Maria into South Maria sett.—G. FRANCIS: Dec. 30.

**UNITED HILLS.**—In the 90 fm. level, eastern end, no lode broken for the past week; in the western end we are still driving south; we have driven about 3 ft. through the lode, and have not yet cut the south wall—it is still producing fair quality; in the eastern stopes the lode is 2 ft. wide, worth 11 ft. per fm. in the 90 fm. level, eastern end, the lode is 2 ft. wide, worth 5 ft. per fm.; in the 70 fm. level, east of eastern shaft, the lode is 2 ft. wide, worth 14 ft. per fm.; west of James's shaft, the lode is about 18 in. wide, worth 5 ft. per fm.; in the stopes, west of eastern shaft, the lode is 2 ft. wide, worth 20 ft. per fm. In the 90 fm. level, the lode is 2 ft. wide, worth 12 ft. per fm. In the shallow adit the lode is 2 ft. wide, poor. In the 40 fm. level the lode is 2 ft. wide, worth 14 ft. per fm. At Wheal Sparrow, in the 40 fm. level, the lode is 18 in. wide, producing but a small quantity of ore. In the 20 fm. level the lode is 2 ft. wide, worth 6 ft. per fm. In Turner's shaft the lode is 2 ft. wide, worth 10 ft. per fm.—T. TREVENEN; R. WILLIAMS: Dec. 29.

**VICTORIA.**—From the unfavourable state of the weather for mining operations, it has retarded our progress greatly in the surface work—consequently, it will require additional hands to complete the work by the time specified. Since my last report, I have put two men to costean, in order to trace the No. 1 lode on a more easterly direction from our present workings, by which I am happy to inform you, that we have cut the lode in several places, in which we have discovered excellent tinstuff; one stone in particular is from 1 to 2 cwt. south of No. 3, and No. 5 about 10 fms. still further south. The workings on the backs of the two latter lodes have been filled in, but there is still a pile of very pretty gossan to be seen from No. 5 lode. At Wheal Charles, in the 50 fm. level, the lode is 2 ft. wide, poor. In the 40 fm. level the lode is 18 in. wide, producing but a small quantity of ore. In the 20 fm. level the lode is 2 ft. wide, worth 6 ft. per fm. In Turner's shaft the lode is 2 ft. wide, worth 10 ft. per fm.—T. TREVENEN; R. WILLIAMS: Dec. 29.

**WEST WHEAL JEWEL.**—In the 115 fm. level east, on Wheal Jewel lode, the lode is not taken down in the past week; we have about 3 fms. more to get under the ore ground, that had we in the 100 fm. level. In the winze in the bottom of the 85 fm. level west of Hodges's cross-course, on Wheal Jewel lode, the lode is not taken down in the past week. In the 12 fm. level west of Quarry shaft, on Tolcarne tin lode, the lode is 1 ft. wide, and worth 7 ft. per fm.; in the winze in the bottom of this level, the lode is 1 ft. wide, and worth 20 ft. per fm.; in the winze, in the bottom of this level, east of Quarry shaft, on the same lode, the lode is worth 5 ft. per fm.; in the 12 fm. level west of old sump-shaft, on the same lode, we met with a cross-course, which has been heaved the lode, which we hope to see by the end of this week; in the winze in the bottom of the deep adit, on the same lode, the lode is 2 ft. wide, and worth 25 ft. per fm.—RICHARD JOHNS: Dec. 29.

**WEST WHEAL MARIA.**—The ground in the eastern engine-shaft is much the same as last reported; the lode in this shaft is 5 ft. wide, producing stones of ore occasionally. There has not been much work done in this shaft the past week, in consequence of setting the plunger-lift to work, and dropping the new lift at the western engine-shaft. At this shaft we have dropped the lift 13 fms. below the 34 fm. level; the sumpmen are now employed in fixing in footway, and taking up water in different parts of the shaft.—T. RODDA: Dec. 29.

**WHEAL BARBARA.**—The lode in the east end in this mine is fast regaining its late fair and promising position—it is looking much more favourable than when last reported, and still very large; in this end I have set 2 fms., at 55 ft. per fm. In the cross-cut in the ravine we have driven since its commencement about 5 fms., and are now at or near the point where I expected to intersect the lode, but have not done so; I intend to try a little further, and for that purpose have set 1 fm., at 20 ft. per fm.—W. H. T. STEPHENS: Dec. 26.

**WHEAL CONCORD.**—We have cut the south lode at the 20 fm. level, which has heaved the lode, which we hope to see by the end of this week; in the winze in the bottom of the deep adit, on the same lode, the lode is 2 ft. wide, and worth 25 ft. per fm.—RICHARD JOHNS: Dec. 29.

bus month; it wholly depends on the locality in the mine whence the ore is extracted. The result of stamping apart the ores from the West Cacheira, 60s. per ton, is satisfactory I consider; but it is only one month's trial, new 15 heads put to the Lyoa have answered, you see, remarkably well, not done 50 per cent. more duty than the old ones. When I find the supplies increasing, I shall endeavour to cut in between the heavy works on, and replace the other 15 old heads by new ones. Cost for September, £42 046 = 28172 0s. 0d.

18.—The supply of ore has been middling only, and Mr. Smyth comments on the quality.

he gross amount of produce at Morro Velho, for the six months ending August last, has been as follows:—March, 4860t.; April, 5012t.; May, 51t.; June, 4666t.; July, 4390t.; August, 4247t. = 28,170t.—Expenditure for six months, 20,319t.; and duty, 5 per cent. at the mine, 2 per cent. 1972t.—Leaves net profit at Morro Velho, 5879t.

following is a statement of the company's finances—cash at the bankers', £2; railway debentures, 5000t.; bill receivable, 85t.; gold in Brazil, part of August produce coming by the packet due in January, 2700t. = 15,548t.—ict, drafts running from Brazil, 5530t.; Brazilian Company's draft, due 12th on account of stores, machinery, &c., purchased from them, 1569t.

Brazil, the amount of funds in the managers' hands, at the end of August, 47,426 milreis (exchange 27d. per milreis), 5335t.—Deduct owing in Brazil, £, leaves total amount in hand, 6854t., from which the dividend of 10s. per t. will take 5500t.—thus leaving a surplus of 1854t.

will be observed, that the produce exceeds that of the corresponding period of last year by 5546t., and that the expenditure exceeds that of the corresponding period of last year by 3446t. The increase in the expenditure, as presented in sterling money, is partly occasioned by the disadvantageous use of the exchange on England, which has prevailed during the last six months in Brazil. During the corresponding six months in 1845, the average change at which the drafts on the company were drawn was 24<sup>1/2</sup>d. per t.; during the last six months it has been 26<sup>1/2</sup>d. The whole of the expenditure in Brazil being made in Brazilian money, this difference in the rate of exchange is an entire loss to the company, without its obtaining any equivalent in any other way. The gold being brought to England (there being no advantage in selling it in Brazil) its produce is not affected by the rate of exchange in Brazil. The loss to the company from this cause has been, during the said six months, 1275t.; the profit for the half-year would, but for this, be 7184t.—G. D. KROGH, Sec.]

**EAST CROWNDALE MINING COMPANY.** The annual meeting of shareholders was held at the offices of the company, Winchester House, Old Broad-street, on Wednesday, the 8th Dec.

JOHN BRIGHTMAN, Esq., in the chair.

From the directors' report it appeared that, during the past year, a powerful steam-engine had been erected, and all the necessary surface erections completed, for fully and effectually developing the lodes in the sett in depth: to accomplish which, a new shaft is being sunk with vigour, and is already down 5 fms.—the main object being to cut the lode further east from the old men's workings, at a depth of 60 fms. This work will be accomplished within 12 months, at a monthly cost of 120t. The old mine had been drained by means of flat-rods, and some good copper ore raised on tribute. It is supposed the new lode is further south than the present workings, and a cross-cut is being driven to prove this, which will be decided in the course of a month. A lead, as well as a tin lode, will be proved, at a trifling cost, in course of the present year. The report further stated, that looking to the rich locality generally—the immense returns made from the adjoining mine of West Crowndale—the quantity of copper ore raised by the former owners from East Crowndale—the present appearances of the operations, and the opinion of the agents, as well as others, the directors anticipate a profitable adventure.

REPORT.

**East Crowndale.** Dec. 28.—The 30 fm. level east still continues on in a dead piece of ground, the lode in the end at present being about 18 in. wide, composed of spar, hookan, mazide, white iron, and, at times, good stones of copper ore, of a small size. It appears as if the bunches of ore, now working upon by the tributaries below the 30 fm. level, and the whole of the bunches taken away by the old men, did not hold so deep as this level, should there be nothing cut in this level by the end of January, 1847, I would recommend that it be stopped until our new engine-shaft be sunk to the 60 fm. level. This will fully and effectually prove the value of the mine in depth; and I confidently hope the result will be a productive mine. Having seen the ill effects of spending time and money in shallow levels, and the well-known fact that 7-10ths of the most productive mines in the county of Devon and Cornwall have worked down to a dead bar of ground, and after persevering to sink till through the deranged part of it, have been crowned with abundant success—I would earnestly call your attention to this part of our future operation. In driving the end, on the cross-cut south, at the 30 fm. level, I beg to give it as my decided opinion, that we shall cut another east and west lode, running parallel to the one now working upon, in the next month, or perhaps, sooner—it being generally supposed that the most productive part of the lode worked upon in the Old West Crowndale is going off in that direction. Should these operations so far prove unsuccessful at the present depth of the mine, I would recommend you allowing the old mine to fill with water, until such time as the lode be cut at the 60 fm. level, in the new engine-shaft—this being done, it will materially lessen the expenditure of the mine, both as to the engine-work and manual labour. By the end of January the tributaries will have taken away most of the ore ground discovered, and sufficient will have been done on the cross-course south, at the 30 fm. level; consequently, the end of January will be a proper time to suspend the operations, as, until nothing be discovered in this part of the mine, until the new shaft be down. Under these arrangements the new shaft can be sunk, and the lode cut, at the 60 fm. level, in about 10 months, at a monthly cost of 120t. I would also recommend that a couple of men be put to clear up the old men's workings on the Rix Hill lode, which runs through the south side of our sett, on which lode, at Wheal Anderton (a mine adjoining our sett), a most capital course of tin is discovered, and now in course of being worked upon; and, also, let these men sink on the lead course, and prove its value, which can be done at about 8f. expenses. In conclusion, I do give it as my candid opinion, and also the opinion of most practical captains and miners in the neighbourhood, that, if the mine be sunk to the 60 fm. level, the result will be one of the most productive mines in the county.—STEPHEN PAUL.

The audited accounts were produced and passed—from which, it appears, the expenditure, from the commencement in Sept., 1845, to 30th Nov., 1846, amounted to 6462t. 9s. 10d.—of which 1960t. was paid for engine, &c., and the balance of 4502t. 9s. 10d., for machinery, compensation to the lord for damage of land, surface erections, and current costs.

The CHAIRMAN stated, that as the meeting would, in all probability, be pleased to hear from their agent, the prospects of, and operations on, the mine, the directors had deemed it prudent to have the captain present, that any questions or inquiries that may be suggested, would be more readily answered. He (the chairman) would, therefore, call upon Capt. Paul to make any statement he thought necessary relative to the mine.

Capt. STEPHEN PAUL gave a concise statement of the present operations, and what was proposed to be done for bringing the mine into a more efficient course of working. He considered the appearances of the lodes fully warranted their taking the engine-shaft right down to the 60 fms., and see the lode at that level—thereby saving the expense of driving intermediate levels before they had sufficient grounds for doing so—at which depth he thought they will have a course of ore, and the lode would become more settled. In coming to this conclusion, he referred to the vast quantities of ore which had been previously raised in the adjoining sets; and, particularly so, from the different lodes having made ore in bunches only at shallow levels. He also referred to the discovery recently made at Wheal Anderton, which lode ran through their sett, and was not more than 150 fms. distant, describing the tin as of the richest quality, and the finest lode he had seen in the county. After minutely stating the character and underlay of the lodes, and satisfactory answering the various questions proposed, he stated, that he considered East Crowndale as one of the most promising adventures in the locality.

The usual business of the meeting having been gone through, the company separately, apparently much pleased with the proceedings.

**CARADON WHEAL HOOPER.**—At a general meeting of shareholders, held at the White Hart Inn, Launceston, on the 16th December, the purser's accounts were presented, showing the costs from August, 1845, to October last, to have been 2755t. 14s. 7d.—the calls during the same period, 3138t. 7s. 7d.; of which remain unpaid, 343t. 10s.: leaving balance in favour of mine 39t. 3s.—The purser, Mr. J. T. Pearce, in his report, says—"Although there has not been hitherto a periodical account of the costs sent to each shareholder, a statement has always been produced, and the costs audited at each meeting; and, for the future, financial particulars will be always forwarded with the captain's report. In handing you a statement, which shews a large number of defaulters, it will be satisfactory to the great body of adventurers to know, that arrangements have been made to enforce the payment of all arrears immediately; at the same time, I must request an early payment of the present call, by all concerned in the speculation. One of the shareholders, being apprehensive that Capt. Seymour's former reports may have been too flattering, employed Capt. Trelease, of Tokenbury Mine, of whose judgment the mining world has a high opinion, to inspect Wheal Hooper; and as Capt. Trelease's report so fully corroborates those which have, from time to time, appeared from Capt. Seymour, it may, perhaps, on this occasion, be more satisfactory to you to receive it 'in lieu of any observations from our own agent'."—My attention was first drawn to visit the lodes, cut in crossing south of the engine-house; I think they are five or six in number, but the most southerly one appears to be of the greatest promise, being a lode of large dimensions, regular and compact, coupled with good walls, and encouraging indications. In the underground department my attention was first called to the 30 fm. level, extended north from the engine-shaft, about 20 fms., where it intersected a lode about 7 ft. wide, consisting of quartz, pebble, mazide, and pumice; these portions are mixed up with killas and caples, and may be termed a lode in a broken up and confused state; but as it is not opened on either east or west, at this point, to any great extent, no further judgment can be given than to say it has good walls, and a regular underlay of about 2<sup>1/2</sup> ft. in fm. About 4 fms. south of the engine-shaft another lode is discovered, and driven on both east and west several fathoms, and whose width will average about 4 ft.; a compact, regular strong looking lode, consisting of pebble, spar, mazide, and spots of ore, well worthy of a further trial. The engine-shaft is sunk from surface about 40 fms., and will soon be in a position to cut a plat, &c., at that level;

and probably it will depend on Capt. Seymour's judgment, together with other causes, whether much work will be done at the 40 fm. level in driving, &c., or whether to wait until the shaft is sunk as deep as the 50. However it may be arranged, I do not imagine that Capt. Seymour will waste much property in the adventure in useless pursuits; for I must say that his prices for the shaft, &c., are in my judgment, of rather too low a figure.—T. TRELEASE.—A call of 17. 10s. per share was made, and the payment of arrears directed to be immediately enforced.

**GWINNEAR CONSOFT.**—A meeting of adventurers was held at the Lanxon Arms, Gwinnear, on Monday, Dec. 21.—W. LANXON, Esq., in the chair. The accounts, as presented, were allowed and passed.—To cost for April, May, June, July, August, September, October, and November, 3682t. 2s. 2d.—By sale of copper ore, 487. 9s. 5d.; ditto tin, 9s. 6s. 1d. (less dues, 1-18th, 5s. 4s. 2d.)—54t. 11s. 4d.—By call of 10s. per share, 120t.—leaves due to the purser, 185t. 10s. 10d.—It was resolved, that the purser, Mr. W. Lanxon, and the captain, Mr. Hugh Stevens, be paid 22. 2s. each per month, for their services; and that the appointment of Mr. Richard Tredinnick, as the London secretary, be confirmed, and that the transfer-book be kept in future at his office, Three Kings-court, Lombard-street, and that he be paid 22. 2s. per month for his services. A call of 17. per share was made, payable at the secretary's office, or to the purser, Mr. W. Lanxon, Wall, near Camborne, Cornwall. The next meeting will be held on the last Monday in February, by which time it is expected the great lode will be intersected at the deep adit level.

**WHEAL TREHANE.**—At a general meeting of shareholders, held at Tiskeard, on the 15th December, it was proposed by Capt. Prince, and seconded by Mr. John Philip, that Capt. J. Bryant, of Altarnun, be elected the resident agent.—The sense of the meeting was taken, and Capt. J. Bryant was declared to be elected, and his salary fixed at 67. 6s. per month.—An abstract of the accounts was submitted to the meeting: the calls, with 35t. tons of ore sold, amounted to 1195t. 1s. 6d.; and the labour cost and materials from the commencement in March to the end of October, and including the November bills, amounted to 7212t. 9s. 1d.; add to which the premium to the lord (Thomas Kelly), 200t.; and dues on the ore sold, 56t. 18s. 4d.—makes the outlay 9721. 7s. 5d.: leaving a balance of 216t. 14s. 0d.: to prosecute the future workings of the mine.—It was proposed by Mr. H. Harvey, and seconded by Mr. B. Sambell, that all materials required for the above mine should be tendered for, which was carried unanimously.—The following report from Capt. John Philip was read to the meeting.—The back of the 20 fm. level, south of the shaft, has been stope about 15 fms. long, and 4 fms. high, which appears to be the top of the lead ground; there are a great many fathoms of lode still in this back, south of shaft, which will pay well for taking down; at this level, north of the shaft (now driven about 20 fms.), the lode is not productive at present; some stones of ore, rich in silver, are, however, occasionally met with. The shaft has been sunk on the course of the lode from this level, down to the 30 fm. level, developing work worth about 20t. per fm.; a winze has also been sunk about 9 fms. further south from the 20 to 30, where the lode is equally good. At the 30 fm. level has been extended south of shaft several fms., but as it approaches towards the boundary, it will not be driven further until dialled; the lode is worth about 15t. per fm.; this level is also about 8 fms. north of shaft, showing a good lode throughout, varying from 1 to 5 ft. wide; the present end is looking well. The shaft has been sunk something below the 30 fm. level, where the lode is 4<sup>1/2</sup> ft. wide, worth about 12t. per fm. The appearance of the mine altogether is very encouraging; and, judging from the underlie of the lode for the last 5 fms. sunk, as well as the underlie of the lode below the 32 in Trelawny, there is little doubt of the lode being found much deeper and larger in the sett than has been before stated. Another parcel of ore is getting ready.

**WHEAL CURTIS COPPER MINING COMPANY.**—This mine, which we have noticed on several previous occasions, appears to be progressing, with prospects increasingly favourable. By the purchase of the large and excellent engine of the Hallenbeagle Mine, and other materials and machinery, for about 2000t. cash down, a saving is estimated to have been effected of 1500t. to the company. In the above sum of 5200t., is included the 1500t. to the proprietor, the erection of engine, engine-house, machinery, &c., and the payment for the entire interest of the mine; and in this following up with spirit the working of the property, six most promising lodes are now in a position to be fully developed, which are spoken of as being of great promise, and likely to make a good return for the capital invested. During the late progress of the works, an additional lode has been discovered, which is reported to have added much to the value of the mine; Capt. Crase has been appointed agent, and Mr. J. Fagan purser and manager; the staff in Cornwall, and the management in London, has been carefully chosen and modified; the dead of settlement will in a few days be ready for signature, the accounts up to the present time will shortly be open for the inspection of the proprietary, and nothing appears to have been omitted, to bring the mine into profitable working at the earliest possible period; the engine is expected to be at work by the 15th inst.; and the first general meeting will take place in August next.

**WHEAL NORRIS MINE.**—In the Journal of Nov. 28, we inserted a report of this mine, signed "J. Clymo," in which it was asserted that the lode was "worth from 30t. to 40t. per fathom." In the following week, we published a letter from Capt. J. B. Clymo, disclaiming all connection with the report; and in the same number we should have stated, that Capt. J. Clymo also denied all knowledge of it. We regret the delay in making this announcement, but it arose from Capt. Clymo's letter being mislaid.

[FROM CORRESPONDENTS.]

**HERODSCOMBE MINE.**—We are advised that an important discovery has been made in a sett called "Herodsccombe," to the east of Herodsfoot Mine. Our correspondent states, "that a stone of lead, weighing 1 cwt., has been taken out of the pit only 5 ft. deep, and that the ore contains 70 ozs. of silver per ton.

**WHEAL ANDERTON.**—I am happy to say the present prospects of this mine are beyond my most sanguine expectations. As soon as the sinking commenced below the 50 fm. level, an improvement was anticipated; the lode in the shaft is now 6 ft. wide, without the north wall having been seen, it produces rocks of tin-stuff, some of which have weighed 118 lbs., some samples of which have given 15 in 20, but the fair average of the lode, without exaggeration, is about 4 in 20; and should it continue as rich down to the 60 fm. level, which it is expected the shaft will reach in about six weeks, it will be a valuable and a profitable mine.

**PENCRAIG LEAD MINE, NORTH WALES.**—This mine is situated in the rich lead mining district of Llanrwst, in the county of Carnarvon, and has been in operation about nine months—is now about to be commenced in a more spirited manner; and from the highly-favourable appearance of the lodes at shallow depths, is likely to become (at no distant period) one of the most profitable mining speculations in North Wales. The sett extends over about 200 acres of ground, and is held under a license, subject to a lease for 21 years, from G. Davies, Esq., of Cyffty, at the usual royalty in Wales, of one-tenth of the produce. Seven distinct veins have been discovered: The operations have hitherto been confined to one of the most promising, having an east and west course, with an inclination of about 2 ft. in a fm. to the north. It has been opened on its course at the surface for about 40 fms. in length, and from 4 fms. to 5 fms. deep, averaging 4 feet in width, being composed of sugary spar and gossan, intermixed with large stones of pure lead ore. A shaft has been commenced on the back of this lode, which is expected to intersect it at depth of about 25 fms. from the surface. Considering the large quantity of lead ore obtained in this country at shallow depths, together with the very flattering appearances of the lode going down opposite the shaft, there remains but little or no doubt, that many hundreds of tons of lead ore will be raised out of the proposed depth, and that at a trifling expenditure. The other lodes in this sett are partly of the same character as the one described; and one lode in particular has produced between 200 and 300 tons of lead ore, at a depth of only 6 fms.; and when these mines were discontinued (owing to the want of sufficient capital to drive an adit of about 150 fms. in length, which would undermine the old works to the depth of about 30 fms.), some good ore was left at the bottom. They have erected a smith's shop, material house, and other erections are in course of completion. The mines are divided into 1024 shares, and are held by parties residing in the locality. [We have received the above from an esteemed correspondent, who promises further contributions relative to the mines in Carnarvonshire, Flint, Cardigan, and the southern counties of North Wales. We shall be at all times pleased to give publicity to his reports, having a high opinion of the mineral lodes of this important mining field, which, we believe, only requires the attention of enterprising capitalists to bring the same to a profitable result. We sincerely wish the adventurers in the above a fulfilment of their most sanguine anticipations.]

**TRELAWARN MINE.**—This sett is situated in the parish of St. Columb Minor, and has been partially worked for upwards of four years by the original adventurers; but it appears their operations have been considerably impeded by a system of jobbing in the shares, adopted by some of the holders—a course which they laudably deprecated; but, having released themselves from such parties, are now progressing with the enterprise in a praiseworthy spirit. The position of the mine is in a favourable locality for lead, and the recent discoveries in Trelawallack, which is immediately to the east, fully warrant this conclusion. The result of the workings has been the discovery of three lodes, from which lead ore have been discovered and raised; and, acting upon the opinions of two eminent mine agents (James Gripe and James Evans), expressed in the following report, they are now entertaining high expectations:—"According to your instructions, we have inspected Trelawarn Mine, and have to observe, that the adit has been driven southward from its commencement upwards of 100 fms., which has intersected three lodes; the first of these is a caunter lode, bearing north-east and south-west. From this lode good specimens of lead ore have been raised—it's appearance, generally, is of good promise, and the nature of the ground in which the lead is deposited, we consider very congenial for lead. There are two other lodes discovered, bearing east and west—from these also lead has been gotten; the leading parts of the lodes,

and the indications near the surface, are encouraging, and hold out a good hope that they will prove yet more productive in the deeper levels. From the general appearance, we would recommend a further development of the mine, by driving east on the east and west lode, discovered under the town-place, on the terrace, in order to intersect the large north-east and south-western lode, as soon as possible, and to extend the adit level on the caunter lode before-mentioned."

#### QUOTATIONS OF SHARES—LAMHEROOE MINE.

Sir.—My attention has been directed, by various shareholders in Lamherooe Wheal Maria, to the quotation of 41. 10s. for three shares, in your Journal of 18th December last; which quotation, you will permit me to state, is not only exceedingly erroneous, but was influenced either by a party, who has to deliver shares bought of him at a lower price, or by others, who have no real knowledge of the prices at which these shares are bought and sold. Since the late discovery in the mine—namely, throughout the entire month of December—the price of Lamherooe shares has been steady at 7s. (or 7. 10s., with call of 7th Dec., paid by the seller), nor do I know of any transactions under this price during that period. It might be presumption on my part, Sir, to offer you advice respecting the course to be pursued by you, in adopting quotations where various interests are concerned; but I think that, when the opportunity is afforded you, of obtaining intelligence from a source which should be of all others, the best informed on all subjects connected with a mine—namely, the office at which the management is conducted, and which is, therefore, the centre of all details connected with it—you would do well to avail of such intelligence, and thus to give your readers quotations of the true value of the mining property managed in this office.—JAMES CROFTS: King-street, Cheapside, Jan. 1.

[Of course, we must regret the receipt of Mr. Croft's letter—not alone for the inconvenience our quotation has occasioned, but that, notwithstanding the efforts we make to obtain an accurate return of business transacted, we should not be enabled to render our list so perfect or satisfactory as to avoid the necessity of such communications; but, with reference to the case of Lamherooe, we can only observe, that the price complained of was furnished to us by a respectable broker, whose name, as in all similar instances, we are prepared to give. We feel, however, bound to add our conviction, that, from recent and continued improvement, Mr. Croft is perfectly justified in stating the price as above, and which we believe to be that at which shares are now selling.]

**SOUTH AUSTRALIAN MINING INTELLIGENCE.**—The reports from the Burra Burra continue as favourable as ever. Several new lodes of fine promise have been lately discovered. The Princess Royal is now beginning to yield beautiful ore. Numerous lodes have been opened; but the chief workings are at present confined to the 6 ft. lode, which is daily increasing in the produce of splendid ore in great abundance. From the Kapunda the accounts are of the same encouraging character as heretofore—the produce of the ore of high quality continuing ample. The Montacute continues its progress steadily and quietly, while the sections adjoining, belonging to the Adelaide Mining Company, recently acquired, are exhibiting all the rich qualities of the neighbouring mine, and will soon be in full and successful work. At the South Australian Company's mines at Mount Barker, and on those adjoining, belonging to the Paragon Mining Company, comprising the range over a rich mineral district of 20,000 acres, in addition to the numerous lodes already open, fresh discoveries continue to be made—affording every reason for the belief that Mount Barker Mines will eventually be second to none within the province. The mines on the special survey at the creek, belonging to the Australian Mining Company of London, have likewise commenced working, and are making most satisfactory progress. The Victoria Gold Mine has again recovered the gold lode, and great results are confidently anticipated as soon as the level at present driving is more advanced. The Greenock Creek reports are equally favourable—the ground is said to be rapidly improving. The Wakefield, from which the numerous indications and surface specimens of fine grey ore have been brought to town, we hear, is likewise more promising. The shaft upon a main lode recently opened is turning out fine ore; and the "horse," which was at one time supposed to have thrown the lode out of this sett, has luckily not done so. The special survey at Mount Remarkable is now definitely taken. There has been a good deal of excitement in town, in consequence of its being officially ascertained that the Governor had refused to allow another special survey to be pursued, for which the means had been provided by the enterprising colonists who had discovered it. We believe it is intended to remonstrate with the Governor on the subject. It is reported that the present proprietors of the Wheal Gavler Lead Mine have sold their interest in it for 2000t. The Glen Osmond and Wheal Watkins Mines are readily turning out ores of superior quality; and a large body of miners, especially engaged to work the Glen Osmond lodes, are hourly expected. The whole payments on the purchases made at the land sale of the mineral lands around the Kapunda

## Mining Correspondence.

## ENGLISH MINES.

**ALBERT CONSOLS.**—These mines are situated in the parish of St. Stephen's, in Branwell, in the county of Cornwall, and immediately adjoins the parish of St. Dennis—being about half-a-mile west of the Victoria Tin Mines, which are at this time in great repute, and of great promise, and whose lodes pass through these sets. There are already discovered three distinct lodes, each being from 4 to 5 ft. wide, underlying north, producing excellent tin-stuff—some rocks from which weigh from 1 to 2 cwt. each, worth 5 cwt. of tin per 100 sacks, and which are now to be seen on the mine. There are also several hundred kibbles of tin-stuff raised, ready to be returned as soon as stamps are erected. The lodes were discovered by a party who are engaged in the china clay-works; and clay being their object, and knowing little of tin, they took scarce any notice of it. There could be an engine erected, and the engine-shaft sunk to the 20 fm. level, and levels extended, and the mines brought into a profitable state of working, for about 1000£, with about an additional 200£ expended in the erection of stamping mills, the cutting of leats, &c. The lodes have been discovered to run several hundreds of fathoms in these sets; and, from their present appearances, I have no hesitation in saying, that, if prosecuted in a spirited manner, they will take their place amongst the first-class dividend-paying mines. I cannot help congratulating you upon the possession of so valuable a speculation.—J. CHYNOWETH: Dec. 30.

**BARRISTOWN.**—We intersected this week in the cross-cut, south of 28 fm. level, a branch of lead about 3 in. wide. The lode in 18 fm. level end west of flat-rod shaft is very much improved, producing 1/2 ton of ore per fm. The lode in 12 fm. level end west of flat-rod shaft is much the same, producing about three-quarters ton per fm. There is nothing discovered in 24 fm. cross-cut, north of engine-shaft; the pitches look well. Nothing new in any other part since my last.—T. ANGOVE: Dec. 26.

**BEDFORD UNITED.**—At Wheal Marquis, the lode in the 80 fm. level east, is 18 in. wide, good work. In the 70 fm. level east, the lode is a little improved, being 18 in. wide, producing good saving work, a very kindly lode. There has been no lode taken down in the 58 fm. level east. At Wheal Tavistock, the lode in the 47 fm. level east is much the same as last reported; and in this level west, the lode is 18 in. wide, producing good stones of ore. The lode in the 38 fm. level east, is 18 in. wide, composed of spar and mundic, with good stones of ore in places. The lode in the south engine-shaft is without important alteration. In the adit level east, the lode is 18 in. wide, very kindly.—JAMES PHILLIPS: Dec. 29.

**CALLINGTON.**—In the 112 fm. level, driving south, the lode has a more productive appearance, producing silver-lead ores; in the north end the lode has not been taken down. In the 100 fm. level, driving north, the lode is again disordered by a hard bar of ground; in the south end we are opening tribute ground; in the winze, sinking below this level, we have not cut into the lode, fearing an increase of water. In the 90 fm. level no ground has been driven since last report, owing to the accumulation of stuff from the tributaries—the winding engine being idle for some days whilst the stuff was in course of securing. At the north mine, in the 100 fm. level, both north and south, we are opening ground that will work at a moderate tribute. In the 90 fm. level south the ground is very soft and congenial—the back will work at a low figure; in the north end the lode is poor. In the 80 and 70 fm. levels the lode continues to produce silver-lead ores; the tribute pitches, on the whole, are looking favourable. The severe weather we have had, has caused a delay in the dressing department—consequently, our sampling will not be quite so early as usual.—J. T. PHILLIPS: Dec. 28.

**COOK'S KITCHEN.**—In Chapple's lode, at the engine-shaft, we are still engaged in cutting a plat at the 180 fm. level. In the 180 fm. level west, the part of the lode, on which we are driving, is 3 ft. wide, worth about 10£ per fm. The winze, from the 170 to the 180 fm. level, west of engine-shaft, is holed, which has laid open a good piece of tin ground for working on tribute. The winze, from the 160 to the 170 fm. level, west of the engine-shaft, is not yet holed; but we expect to do so in course of the ensuing fortnight, when we shall be able to work to greater advantage the valuable tin ground, through which it is sunk; the winze and the rise continues of about the same value as when last reported—viz: worth about 20£ per fm. The lode in the winze, sinking under the 148 fm. level, west of engine-shaft, is about 3 ft. wide, and worth 8£ per fm.; in the 148 fm. level, east of engine-shaft, the lode is worth 8£ per fm. The lode in new east shaft, sinking below the 140 fm. level, is poor. In the 160 fm. level west, on the south part of Chapple's lode, the lode is worth about 10£ per fm. Eudy's lode, in the 92 fm. level, west of new east shaft, is poor. We have again met with a misfortune, by breaking one of the axles of the steam stamp—it is one belonging to the old part of the machine, which was put in order by the previous management: this will throw us back somewhat; but we shall, notwithstanding, on Friday next, send to the smelting-house 12 tons of tin, and, but for the breakage, should have got about 15 tons. The mine, on the whole, is looking better; and our sales of tin will, for the future, be larger than they have been.—JOSPH VIVIAN: Dec. 28.

**CUBERT SILVER-LEAD.**—The sumpmen will be engaged the whole of January month in cutting whim-plate at the 35 fm. level, and also cutting and sinking for cistern, bearers, &c., &c. At the 25 fm. level, going west, we have a very promising level—lode 18 in. wide, and will produce 1 ton per fm.; at this level, going east, the lode of late has much improved—being 2 ft. wide, yielding rich stones of lead. In the 15 fm. level, driving west, the lode is 1 ft. wide, and still passing through ground which will set at a moderate tribute—say, 3s. tribute; the eastern end, at this level, is a large, rich-looking gossan, producing occasionally good work for lead. We have this day made the pay for November, and held the setting for January, 1847. We have set 12 pitches, employing 58 men, varying from 4d. to 5d. per ton. Our computed 55 tons of silver-lead ores were sold to Messrs. Walker, Parker, and Co., for 12.1s. 6d. per ton on the 19th inst.; it weighed 55 tons (21 cwt.) 3 cwt., and is shipped at the gunnel.—RICHARD ROWE.

**EAST TAMAR CONSOLS.**—At Whitson, the ground in Hitchins's shaft still continues hard for sinking. The lode in the 54 fm. level north is 20 in. wide, fluor-spar, and silver-lead ore; the lode in the 54 fm. level south is 2 ft. wide, north of a good quality. The lode in the 46 fm. level south is 1 ft. wide, good stones of ore. At Furzehill, the lode in Harrison's shaft is 2 ft. wide, a very promising lode. The lode in the 38 fm. level north is 18 in. wide, saving work. The lode in the 28 south is 2 ft. wide, work of a good quality. In the 30 fm. level south, the lode is 2 ft. wide, a very kindly lode.—B. ROBINS: Dec. 29.

**GREAT MICHELL CONSOLS.**—In the 22 fm. level east, the lode is chiefly gossan and spar, with spots of copper ore; in the 22 west, the lode has a very promising appearance, containing gossan, spar, and mundic, with some good black and yellow copper ore. The engine-shaft is down 4 fms. 2 ft. below the 12 fm. level.—T. RICHARDS: Dec. 29.

**GUNNIS LAKE.**—At Chilsworthy, the lode in Bailey's engine-shaft is 4 ft. wide, composed of gossan, peat, spar, and ore, very kindly. There is no alteration in the 12 fm. level east and west since my last.—B. ROBINS: Dec. 29.

**HAWKMOOR.**—The lode in the 15 fm. level, east of Hitchins's shaft, continues 3 ft. wide, producing stones of ore in places.—P. RICHARDS: Dec. 29.

**HERODSFOOT.**—We have been delayed in our cross-cut at the 72, so that we have not yet cut the lode, which we shall do in the course of next week—indications are very favourable. We have also been delayed in our driving by the frost, and by the breaking of the cog-wheel of the crushing machine, so that our parcel of ore is not ready. I have set two pitches in the back of the 62, 1/2 fm. level line, between Rowe's land and Boleot manor, in about 7 in. The other alteration of importance, since I wrote you.

**HOLMBUSH.**—There is nothing new to report on this week respecting the shaftmen—they are still going on with their contracts. The lode in the 120 fm. level, west of the great cross-course, is 20 in. wide, and worth 40£ per fm.; in driving north of this level, we have communicated with the 120 fm. level, south from the winze. The 110 fm. level, west of the lead lode, is for the present suspended, and the men set to rise above this level, on the floor part of the lead lode, to unwater the bottom of the 110 fm. level, and for ventilation; we have cut through the main part of the lead lode at the 110 fm. level, and find it to be 14 in. wide, composed of fluor-spar, white spar, and fine stones of lead, worth 6£ per fm.; we think it a very promising lode indeed, and have set to drive south on it at 4£ per fm.; we have not sufficient air to drive north on it at the same time, until the communication is made to the 100. The lode in the winze, sinking below the 100 fm. level, between the great cross-course and the slide, is 14 in. wide, and worth 12£ per fm.; the lode in the 100 fm. level south, is 18 in. wide, composed of floor-spar, spar, and stones of lead. The lead pitches, on the whole, are much the same as last reported on. Some day next week, we hope to have 12 tons of lead for sale; last Friday, being Christmas day, the copper ore samplers thought proper to postpone the sampling until next Friday, January 1.—W. LEAN: Dec. 29.

**KIRKCUDBRIGHTSHIRE.**—Having cut the plat at the bottom of Stewart's shaft, we shall now commence driving east and west on the lode at the 30 fm. level, and, in the meantime, expect to finish fixing the pitwork in course of next week. The 20 fm. level, driving east of this shaft, having been filled up with stuff, the whim, not being able to discharge it and keep the water, has for the present to be suspended; the same may be said of the winze sinking under this level. The stope in roof of same level have greatly improved since my last, both east and west of shaft, worth at present 6£ per fm. for lead. The lode in the adit end is without much alteration. Our dressers are still delayed in their business by hard frost. In our erections we are progressing as fast as possible.—JOSEPH BUZZO: Dec. 26.

**LANTVET CONSOLS.**—The leader part of the lodes, in the 80 fm. level east is 3 ft. wide, a good grey lode; ditto west, the leader part of the lode is 18 in. wide, producing good stones of ore. In the 40 fm. level east the floor-spar, and south part, of the lode, on which we are present driving, is 18 in. wide, producing a small quantity of ore, but not worth saving. In the winze, sinking

below the 80 fm. level, on the north part of the lode, the leader part is 3 ft. wide, good saving work. In the winze, sinking below the 40 fm. level west, the lode is 18 in. wide, producing good saving work—this is on the leader part south, and at present very kindly.—H. WILLIAMS.

**LEWIS.**—The lode in the 60 fm. level, east of Wheal Nutt engine-shaft, is 2 ft. wide, worth 6£ per fm. for tin. The lode in the 50 fm. level east and east is 6 ft. wide, worth 40£ per fm. for tin; we are continuing the cross-cut south at the 50, west of sump whin shaft, ground hard. The lode in the 40 fm. level east is 2 ft. wide, worth 10£ per fm. for tin. Tin shaft we have suspended, in consequence of more water: than we keep with barrels. The lode in the winze, sinking under the 40 fm. level, on the south branch, is 8 in. wide, worth 5£ per fm. for tin. The lode in the 30 fm. level east is 2 ft. wide, worth 5£ per fm. for tin; the lode in the 30 end west, on south branch, is 10 in. wide, set at 11s. in the 11 for saving the tin. Our present prospects are more favourable than ever.—S. S. NOELL: Dec. 26.

**LOSTWITHIEL CONSOLS.**—On the caunter lode (No. 7) an adit has been extended a considerable distance; it has produced gossan and spar, with spots of copper, mundic, and portions of sulphate of barytes. As far as I could see and learn, No. 3 appears to be the main lode; it runs through the middle of the sett, and has been opened on near the engine-shaft for 6 or 7 fms. in length, where it is a large lode of fine natured gossan, and I was shown some spots of copper pyrites that were raised from it. No. 4 lode has been seen about 30 fms. south from No. 3, and No. 5 about 10 fms. still further south. The workings on the backs of the two latter lodes have been filled in, but there is still a pile of very pretty gossan to be seen from No. 5 lode. A cross-cut has been commenced on a large quartz cross-course, nearly opposite the engine-shaft, which will intersect Nos. 4 and 5 lodes about 7 fms. below surface; this I advise should be extended to the lodes, as it will partially develop their character, and show whether they be worthy of trial at a deeper level. The engine-shaft has been fixed about 250 fms. from the eastern boundary, and 27 fms. north from the back of No. 3 lode, with the design of the lode dipping into the shaft, about 70 fms. below the surface; the shaft is now 13 fms. deep, with a horse-whin erected on it to draw the water and stuff; they will, probably, be enabled to sink a few fathoms deeper by this means, until a steam-engine can be got ready, which circumstances seem to warrant, and require with all possible expedition, as I do not think it probable you can sink far with the present mode of drainage. Having surveyed the locality, and made various inquiries to ascertain the probable quantity of water the engine would have to draw, I find that an engine of 36-inch cylinder would drain the mine to the depth of from 90 fms. to 100 fms. The engine (with the cylinder over the shaft, similar to that at Lamheroe) has been found extremely efficient and economical to work, and costs less to erect—I would, therefore, recommend one of that description.—J. C. LYMO: Dec. 30.

**PENTUAN WHEAL MARY.**—At the adit end south-west, the ground through which we have driven, is much the same as last reported. Since my last, we have sunk on the middle lode; and I am happy to inform you, that the lode is improved both in size and quality, being from 6 to 8 ft. wide, composed of a beautiful gossan, with fine pieces of copper ore—a very promising lode indeed, and, from the indications, highly encouraging. Since the above was written, I have been informed that the lode is still further improved.—JAMES CHYNOWETH: Dec. 29.

**SILVER VALLEY.**—The tin lode, in the 40 fm. level east, is 2 1/2 feet wide, and is poor for tin at present, but has a very promising appearance; in the western level there has been but a little of the lode taken down, and without alteration. The lode in the 30 fm. level west, is divided by a horse of killas; the north branch is small, composed chiefly of spar and mundic, and the south or main part is 20 in. wide, producing a little tin-work; the pitches and stope are without any important alteration since last report. At the silver mine, in the stope, in the back of the 30 fm. level west, the lode varies in size from 4 in. to 16 in. in width, two-thirds of which we are saving for work, and selecting some good stones of grey and ruby silver; in the eastern stope, in the back of this level, the lode is 2 ft. 3 in., composed of floor-spar and carbonate of iron, with occasional spots of lead; and, altogether, it presents very favourable indications. In the 20 fm. level west, the lode has improved in appearance since we commenced driving; it is about 20 in. wide, composed of floor-spar, with carbonate of iron and spots of silver-lead ore. The lode in the 10 fm. level east; 13 1/2 ft. wide, composed chiefly of floor-spar and quartz. At Wheal Sisters, in the shallow level east, the lode is 2 ft. wide, with a branch of carbonate of iron and mundic in the south part, containing some good work of sulphuret, and a little native silver. At present the silver lode, upon the whole, looks tolerably well.—S. RICHARDS: Dec. 28.

**SOUTH MARIA.**—Having been recently appointed the managing agent of this mine, I beg to inform the distant shareholders, that the dam, or vein, across the river Tamar, is in course of repair, which we hope to complete this week, so as to enable us to set the machinery to work, when it is intended, on the shaft being drained, to resume sinking; the shaft is now 12 fms. under the adit level, and 23 fms. from the surface. This sett is about 450 fms. long east and west on the course of the lodes, and about the same in width, and contains five distinct lodes, running east and west—three of them, south of the shaft, varying in size from 2 ft. to 5 ft. wide; the greatest depth sunk on either of these is 15 ft., and are of a very promising nature, composed of gossan, interspersed with spots of yellow ore, and underlying north; the two other lodes are north of the shaft—the extreme north of which is from 4 ft. to 6 ft. wide, producing some good tin-stuff on the back, but more than probable will produce copper in depth. I have not seen a more promising lode than this in the neighbourhood—Wheal Maria excepted. There has not been sufficient done on this lode to ascertain its underlying. It is intended to drive north from the shaft to the two last-named lodes at a depth of 30 fms., and to the three former at 40 fms. deep—the wheel being supposed to be of sufficient power to drain the mine 50 fms. deep under the adit. Several branches have already been discovered in sinking the shaft, which produced some pretty yellow ore. There has been a canter lode cut in the wheel-pit, and, from its course, will come in contact with the other lodes near the engine-shaft, where we anticipate some good deposits will be found. The large cross-course, which has been sunk on about 5 fms., and from which some good lead ore have been taken, will fall in with the caunter in this sett. This sett has Devon Great Consols, or the Maria sett, for its boundary east, and Wheal Williams north; the five named east and west lodes are visible in the bed of the river Tamar, running from the Great Maria into South Maria sett.—G. FRANCIS: Dec. 30.

**SOUTH TAMAR UNITED.**—The weather still continues very unfavourable for the surface work, so that the masons have not been able to get on with the buildings so fast as I could wish, for the last week past. The men in the adit level have cleared and secured 53 fms. north from the adit shaft.—B. ROBINS: Dec. 29.

**TRELEIGH CONSOLS.**—Christoe's shaft, below the 100 fm. level, will require 80£ to make it 10 fms. 2 ft. below that level; we have 7 fms. to sink to make it this depth—this is in the country; in the 100, east of Christoe's shaft, the lode is 2 ft. wide, worth about the same as last week (10£ per fm.); but we think it will be soon better, as we are near the junction of both branches; in the 100 fm. level, west of Christoe's shaft, the lode is about 1 ft. wide, with occasional stones of ore. In the winze, below the 90, east of Christoe's shaft, the captain's price is 2£ per fm. and 2s. 6d. tribute—2 fms. taken at one-fourth per fm. In Christoe's shaft, below the 90 fm. level, sinking in the country, the ground is rather better—the lode still standing north, with little of any inclination towards the shaft. In the 90 fm. level, west of Christoe's shaft, the lode is about 2 ft. wide—at present only a little ore, but it is looking kindly; and we expect a better lode ere long, after we get off the cross-course. In the 80, west of Christoe's shaft, the lode is 2 ft. wide, producing good stones of ore, but not of value; in the winze, below the 80 fm. level west, we cannot commence sinking for a week or more—we want to drive the 80 a little further west, to get it clear of the winze. The winze, below the 70 fm. level, is holed to the 80 fm. level, and will shortly be resumed below the 80 fm. level; the 70 fm. level, west of Christoe's shaft, is suspended for the present, and the men put into the winze below the 80; in the 70, west of Good Fortune, the lode is from 4 to 5 ft. wide, producing some good stones of ore. In the 60 fm. level, west of Symons's, the lode is 20 in. wide, looking more promising, and yielding stones of ore. In the 50, west of north lode, the lode is 10 in. wide, of rather a promising appearance; the 50, east of the north lode, is suspended and poor, and the men put to drive east. In the 44, west of Symons's, the lode is 10 in. wide, producing stones of ore, not sufficient to value; in the adit cross-cut south we have 2 fms. more to hoist to the west shaft; should the air prove favourable to allow us to work, we shall hoist in about two weeks. The 20, west of adit cross-cut, will be driven by the adit men, when there is no air to work in the above.—W. SYMONS: Dec. 24.

**TREWALLACK.**—The 30 fm. level, north and south, is suspended. In the 20 fm. level south the lode has been divided for some days past in two parts, but at present they are inclining towards each other; the western part, on which the end is being driven, is 2 ft. wide, with spar, floor-spar, blistered mundic, and large cubes of lead scattered through it; this end is 13 fms. north of the Mowbray shaft, and about 23 fms. north of the slide seen in the adit, south of which the lode began to improve, and produce lead. The Mowbray shaft is 5 fms. under the adit—lode 2 ft. wide, composed of capel, with a quantity of soft blue floor-spar and mundic. Our new south shaft is sunk 9 fms. below the surface, where, since the snow, the water has so increased as to prevent us from sinking. We have bored a hole 18 ft. under the present bottom, and are at present rising in the back of the adit to communicate to the lower hole, and thus let down the water, so as to enable us to sink the shaft, expecting daily to hole; but the air is so bad, we can scarcely live in the place. I am much pleased to see so fine a channel of blue killas as there is in the south part of the mine, and we hope, in about 10 days, to resume driving the adit end south through that fine promising lode, and set some pitches in the back of the level.—S. LEAN.

**WHEAL AGNES.**—The ground in the levels is in a disordered state; lode small at present.—B. ROBINS: Dec. 29.

**UNITED HILLS.**—In the 90 fm. level, eastern end, no lode broken for the past week; in the western end we are still driving south; we have driven about 3 ft. through the lode, and have not yet cut the south wall—it is still producing ore of fair quality; in the eastern stope the lode is 2 1/2 ft. wide, worth 11£ per fm. in the western stope; the lode is 3 ft. wide, worth 5£ per fm.; in driving north no lode cut as yet, we expect to do so by survey-day next. In the 70 fm. level, eastern end, the lode is 2 ft. wide, worth 14£ per fm.; west of James's shaft, the lode is about 18 in. wide, worth 5£ per fm.; in the stope, west of eastern shaft, the lode is 3 1/2 ft. wide, worth 20£ per fm. In the 60 fm. level, the lode is 3 ft. wide, worth 4£ per fm. At Wheal Charles, in the 50 fm. level, the lode is 2 ft. wide, poor. In the 40 fm. level the lode is 18 in. wide, worth 14£ per fm. At Wheal Sparrow, in the 40 fm. level the lode is 18 in. wide, producing but a small quantity of ore. In the 30 fm. level the lode is 8 ft. wide, worth 6£ per fm. In Turner's shaft the lode is 2 ft. wide, worth 10£ per fm.—T. TREVENEN; R. WILLIAMS: Dec. 29.

**VICTORIA.**—From the unfavourable state of the weather for mining operations, it has retarded our progress greatly in the surface work—consequently, it will require additional hands to complete the work by the time specified. Since my last report, I have put two men to costean, in order to trace the No. 1 lode on a more easterly direction from our present workings, by which I am happy to inform you, that we have cut the lode in several places, in which we have discovered excellent tin-stuff; one stone in particular is from 1 to 2 cwt., specimens of which I have forwarded to London, the stone entire being too large to send on; the bulk of the stone is now on the mines, for the inspection of those who may feel an interest in visiting our mines.—J. CHYNOWETH.

**WEST WHEAL JEWEL.**—In the 115 fm. level east, on Wheal Jewel lode, the lode is not taken down in the past week; we have about 2 fms. more to get under the ore ground, that we had in the 100 fm. level. In the winze in the bottom of the 85 fm. level west of Hodges's cross-course, on Wheal Jewel lode, the lode is not taken down in the

# ATMOSPHERIC RAILWAY GAZETTE.

previous month; it wholly depends on the locality in the mine whence the ore is extracted. The result of stamping apart the ores from the West Cacheira, 2,401 ohs. per ton, is satisfactory I consider; but it is only one month's trial. The new 15 heads put to the Lyon have answered, you see, remarkably well, having done 50 per cent. more duty than the old ones. When I find the supply of ore increasing, I shall endeavour to cut in between the heavy works on hand, and replace the other 15 old heads by new ones. Cost for September, £5,042 04d. — £2,177 0s. 0d.

Oct. 18.—The supply of ore has been middling only, and Mr. Smyth complains of the quality.

[The gross amount of produce at Morro Velho, for the six months ending 31st August last, has been as follows—March, 4896L; April, 5012L; May, 5049L; June, 4666L; July, 4390L; August, 4247L—28,170L—Expenditure for the said six months, 20,319L; and duty, 5 per cent. at the mine, 2 per cent. on exportation, 1,972L—Leaves net profit at Morro Velho, 5879L.

The following is a statement of the company's finances—cash at the bankers', 7763L; railway debentures, 5000L; bill receivable, 85L; gold in Brazil, part of the August produce coming by the packet due in January, 2700L = 15,549L—Deduct, drafts running from Brazil, 5530L; Brazilian Company's draft, due 12th Dec., on account of stores, machinery, &c., purchased from them, 1569L.

In Brazil, the amount of funds in the managers' hands, at the end of August, was 47,426 milreis (exchange 27L per milrei), 5355L—Deduct owing in Brazil, 3390L, leaves total amount in hand, 6854L, from which the dividend of 10s. per share will take 5500L—thus leaving a surplus of 1354L.

It will be observed, that the produce exceeds that of the corresponding period of last year by 5546L, and that the expenditure exceeds that of the corresponding period of last year by 8446L. The increase in the expenditure, as represented in sterling money, partly occasioned by the disadvantageous course of the exchange on England, which has prevailed during the last six months in Brazil. During the corresponding six months in 1845, the average exchange at which the drafts on the company were drawn was 24L 4d. per milrei; during the last six months it has been 26L 4d. The whole of the expenditure in Brazil being made in Brazilian money, this difference in the rate of exchange is an entire loss to the company, without its obtaining any equivalent in any other way. The gold being brought to England (there being no advantage in selling it in Brazil) its produce is not affected by the rate of exchange in Brazil. The loss to the company from this cause has been, during the aforesaid six months, 1275L; the profit for the half-year would, but for this, have been 7154L—G. D. KEIGH, Secy.]

## EAST CROWNDALE MINING COMPANY.

The annual meeting of shareholders was held at the offices of the company, Winchester House, Old Broad-street, on Wednesday, the 30th Dec.

JOHN BRIGHENTON, Esq., in the chair.

From the directors' report it appeared that, during the past year, a powerful steam-engine had been erected, and all the necessary surface erections completed, for fully and effectually developing the lodes in the sett in depth: to accomplish which, a new shaft is being sunk with vigour, and is already down 26 fms.—the main object being to cut the lode further east from the old men's workings, at a depth of 60 fms. This work will be accomplished within 12 months, at a monthly cost of 120L. The old mine had been drained by means of flat-rods, and some good copper ore raised on tribute. It is supposed the main lode is further south than the present workings, and a cross-cut is being driven to prove this, which will be decided in the course of a month. A lead, as well as a tin lode, will be proved, at a trifling cost, in course of the present year. The report further stated, that looking to the rich locality generally—the immense returns made from the adjoining mine of West Crowndale—the large quantity of copper ore raised by the former owners from East Crowndale set—the present appearances of the operations, and the opinion of the agents, as well as others, the directors anticipate profitable adventure.

### REPORT.

*East Crowndale, Dec. 28.*—The 30 fm. level east still continues on in a dead piece of ground, the lode in the end at present being about 18 in. wide, composed of spar, flookan, mundic, white iron, and, at times, good stones of copper ore, of a small size. It appears as if the bunches of ore, now working upon by the tributaries below the 20 fm. level, and the whole of the bunches taken away by the old men, did not hold so deep as this level. Should there be nothing cut in this level by the end of January, 1847, I would recommend its being stopped until our new engine-shaft be sunk to the 60 fm. level. This will fairly and effectually prove the value of the mine in depth; and I confidently hope the result will be a productive mine. Having seen the ill effects of spending time and money in shallow levels, and the well-known fact that 7-10ths of the most productive mines in the county of Devon and Cornwall have worked down to a dead bar of ground, and after persevering to sink till through the deranged part of it, have been crowned with abundant success—I would earnestly call your attention to this part of our future operation. In driving the end, on the cross-cut south, at the 30 fm. level, I beg to give it as my decided opinion, that we shall cut another east and west lode, running parallel to the one now working upon, in the next month, or, perhaps, sooner—it being generally supposed that the most productive part of the lode worked upon in the old West Crowndale is going off in that direction. Should these operations so far prove unsuccessful at the present depth of the mine, I would recommend you allowing the old mine to fill with water, until such time as the lode be cut at the 60 fm. level, in the new engine-shaft; this being done, it will materially lessen the expenditure of the mine, both as to the engine-work and manual labour. By the end of January the tributaries will have taken away most of the ore-ground discovered, and sufficient will have been done on the cross-course south, at the 30 fm. level; consequently, the end of January will be a proper time to suspend the operations, should nothing be discovered in this part of the mine, until the new shaft be down. Under these arrangements the new shaft will be sunk, and the lode cut, at the 60 fm. level, in about 10 months, at a monthly cost of 120L. I would also recommend that a couple of men be put to clear up the old men's workings on the Bix Hill lode, which runs through the south side of our sett, on which lode, at Wheal Anderton (a mine adjoining our sett), a most capital course of tin is discovered, and now in course of being worked upon; and, also, let these men sink on the lead course, and prove its value, which can be done at about 4L expenses. In conclusion, I do give it as my candid opinion, and also the opinion of most practical captains and miners in the neighbourhood, that, if the mine be sunk to the 60 fm. level, the result will be one of the most productive mines in the county.—STEPHEN PAUL.

The audited accounts were produced and passed—from which, it appears, the expenditure, from the commencement in Sept., 1845, to 30th Nov., 1846, amounted to 6462L 9s. 10d.—of which 1960L was paid for engine, &c.; and the balance of 4502L 9s. 10d., for machinery, compensation to the lord for damage of land, surface erections, and current costs.

The CHAIRMAN stated, that as the meeting would, in all probability, be better pleased to hear from their agent, the prospects of, and operations on, the mine, the directors had deemed it prudent to have the captain present, that any questions or inquiries that may be suggested, would be more readily answered. He (the chairman) would, therefore, call upon Capt. Paull to make any statement he thought necessary relative to the mine.

Capt. STEPHEN PAUL gave a concise statement of the present operations, and what was proposed to be done for bringing the mine into a more efficient course of working. He considered the appearances of the lodes fully warranted their sinking the engine-shaft right down to the 60 fms., and see the lode at that level—thereby saving the expense of driving intermediate levels before they had sufficient grounds for doing so—at which depth he thought they will have a course of ore, and the lode would become more settled. In coming to this conclusion, he referred to the vast quantities of ore which had been previously raised in the adjoining sets; and, particularly so, from the different lodes having made ore in bunches only at shallow levels. He also referred to the discovery recently made at Wheal Anderton, which lode ran through their sett, and was not more than 150 fms. distant, describing the tin as of the richest quality, and the finest lode he had seen in the county. After minutely stating the character and underlay of the lodes, and satisfactory answering the various questions proposed, he stated, that he considered East Crowndale as one of the most promising adventures in the locality.

The usual business of the meeting having been gone through, the company separated, apparently much pleased with the proceedings.

*CAERDON WHEAL HOOPER.*—At a general meeting of shareholders, held at the White Hart Inn, Launceston, on the 15th December, the purser's accounts were presented, showing the costs from August, 1845, to October last, to have been 2755L 14s. 7d.—the calls during the same period, 3138L 7s. 1d.; of which remain unpaid, 343L 10s.: leaving balance in favour of mine 39L 3s.—The purser, Mr. J. T. Pearce, in his report, says—"Although there has not been hitherto a periodical account of the costs sent to each shareholder, a statement has always been produced, and the costs audited at each meeting; and, for the future, financial particulars will be always forwarded with the captain's report. In handing you a statement, which shews a large number of defaulters, it will be satisfactory to the great body of adventurers to know, that arrangements have been made to enforce the payment of all arrears immediately; at the same time, I must request an early payment of the present call, by all concerned in the speculation. One of the shareholders, being apprehensive that Capt. Seymour's former reports may have been too flattering, employed Capt. Trelease, of Tokenbury Mine, of whose judgment the mining world has a high opinion, to inspect Wheal Hooper; and as Capt. Trelease's report so fully corroborates those which have, from time to time, appeared from Capt. Seymour, it may perhaps, on this occasion, be more satisfactory to you to receive it in lieu of any observations from our own agent."—My attention was first drawn to visit the lodes, cut in costerning south of the engine-house; I think they are five or six in number, but the most southerly one appears to be of the greatest promise, being a lode of large dimensions, regular and compact, coupled with good walls, and encouraging indications. In the underground department my attention was first called to the 30 fm. level, extended north from the engine-shaft, about 20 fms., where it intersected a lode about 7 ft. wide, consisting of quartz, peach, mundic, and prian; these portions are mixed up with killas and capies, and may be termed a lode in a broken up and confused state; but as it is not opened on either east or west, at this point, to any great extent, no further judgment can be given than to say it has good walls, and a regular underlay of about 2 ft. in a fm. About 4 fms. south of the engine-shaft another lode is discovered, and driven on both east and west several fathoms, and whose width will average about 4 ft.; a compact, regular strong looking lode, consisting of peach, spar, mundic, and spots of ore, well worthy of a further trial. The engine-shaft is sunk from surface about 40 fms., and will soon be in a position to cut a plat, &c., at that level;

and probably it will depend on Capt. Seymour's judgment, together with other causes, whether much work will be done at the 40 fm. level in driving, &c., or whether to wait until the shaft is sunk as deep as the 50. However it may be arranged, I do not imagine that Capt. Seymour will waste much property in the adventure in needless pursuits; for I must say that his prices for the shaft, &c., are in my judgment, of rather too low a figure.—T. TRELEASE.—A call of 1L 10s. per share was made, and the payment of arrears directed to be immediately enforced.

*GWINNEAR CONSORT.*—A meeting of adventurers was held at the Lanyon Arms, Gwinnear, on Monday, Dec. 21.—Wm. LANYON, Esq., in the chair.—The accounts, as presented, were allowed and passed.—To cost for April, May, June, July, August, September, October, and November, 3682L 2s. 2d.—By sale of copper ore, 28L 9s. 5d.; ditto tin, 9L 6s. 1d. (less dues, 4L 18s. 6d. 2d.)—54L 11s. 4d.—By call of 10s. per share, 128L—leaves due to the purser, 185L 10s. 10d.—It was resolved, that the purser, Mr. W. Lanyon, and the captain, Mr. Hugh Stevens, be paid 2L 2s. each per month, for their services; and that the appointment of Mr. Richard Tredinnick, as the London secretary, be confirmed, and that the transfer-book be kept in future at his office, Three Kings-court, Lombard-street, and that he be paid 2L 2s. per month for his services. A call of 1L per share was made, payable at the secretary's office, or to the purser, Mr. W. Lanyon, Wall, near Camborne, Cornwall. The next meeting will be held on the last Monday in February, by which time it is expected the great lode will be intersected at the deep adit level.

*WHEAL TREHANE.*—At a general meeting of shareholders, held at Liskeard, on the 15th December, it was proposed by Capt. Prince, and seconded by Mr. John Philp, that Capt. J. Bryant, of Altarnun, be elected the resident agent.—The sense of the meeting was taken, and Capt. J. Bryant was declared to be elected, and his salary fixed at 6L 6s. per month.—An abstract of the accounts was submitted to the meeting: the calls, with 35L tons of ore sold, amounted to 1195L 1s. 6d.; and the labour cost and materials from the commencement in March to the end of October, and including the November bills, amounted to 721L 9s. 1d.; add to which the premium to the lord (Thomas Kelly), 200L; and dues on the ore sold, 56L 18s. 4d.—makes the outlay 972L 7s. 5d.: leaving a balance of 216L 13s. 0d.; to prosecute the future workings of the mine.—It was proposed by Mr. H. Harvey, and seconded by Mr. B. Sambell, that all materials required for the above mine should be tendered for, which was carried unanimously.—The following report from Capt. John Philp was read to the meeting.—The back of the 20 fm. level, south of the shaft, has been stopped about 15 fms. long, and 4 fms. high, which appears to be the top of the lead ground; there are a great many fathoms of lode still in this back, south of shaft, which will pay well for taking down; at this level, north of the shaft (now driven about 20 fms.), the lode is not productive at present; some stones of ore, rich in silver, are, however, occasionally met with. The shaft has been sunk on the course of the lode from this level, down to the 30 fm. level, developing work worth about 200 per fm.; a winze has also been sunk about 9 fms. further south from the 20 to 30, where the lode is equally good. At the 30 fm. a level has been extended south of shaft several fms., but as it approaches towards the boundary, it will not be driven further until dialled; the lode is worth about 15L per fm.; this level also about 8 fms. north of shaft, showing a good lode throughout, varying from 1 to 5 ft. wide; the present end is looking well. The shaft has been sunk something below the 30 fm. level, where the lode is 4L wide, worth about 12L per fm. The appearance of the mine altogether is very encouraging; and, judging from the underlie of the lode for the last 5 fms. sunk, as well as the underlie of the lode below the 32 in Treawney, there is little doubt of the lode being found much deeper and larger in the set than has been before stated. Another parcel of ore is getting ready.

*WHEAL CURTIS COPPER MINING COMPANY.*—This mine, which we have noticed on several previous occasions, appears to be progressing, with prospects increasingly favourable. By the purchase of the large and excellent engine of the Hallenbeagle Mine, and other materials and machinery, for about 2000L cost down, a saving is estimated to have been effected of 1500L to the proprietor, the erection of engine, engine-house, machinery, &c., and the payment for the entire interest of the mine; and in thus following up with spirit the working of the property, six most promising lodes are now in a position to be fully developed, which are spoken of as being of great promise, and likely to make a good return for the capital invested. During the late progress of the works, an additional lode has been discovered, which is reported to have added much to the value of the mine; Capt. Crase has been appointed agent, and Mr. J. Fagan purser and manager; the staff in Cornwall, and the management in London, has been carefully chosen and modified; the deed of settlement will in a few days be ready for signature, the accounts up to the present time will shortly be open for the inspection of the proprietary, and nothing appears to have been omitted, to bring the mine into profitable working at the earliest possible period; the engine is expected to be at work by the 10th inst.; and the first general meeting will take place in August next.

*WHEAL NORRIS MINE.*—In the Journal of Nov. 28, we inserted a report of this mine, signed "J. Clymo," in which it was asserted that the lode was "worth from 30L to 40L per fathom." In the following week, we published a letter from Capt. J. B. Clymo, disclaiming all connection with the report; and in the same number we should have stated, that Capt. J. Clymo also denied all knowledge of it. We regret the delay in making this announcement, but it arose from Capt. Clymo's letter being mislaid.

### [FROM CORRESPONDENTS.]

*HERODSCOMBE MINE.*—We are advised that an important discovery has been made in a sett called "Herodsccombe," to the east of Herodsfoot Mine. Our correspondent states, "that a stone of lead, weighing 1 cwt., has been taken out of the pit only 5 ft. deep, and that the ore contains 70 ozs. of silver per ton.

*WHEAL ANDERTON.*—I am happy to say the present prospects of this mine are beyond my most sanguine expectations. As soon as the sinking commenced below the 50 fm. level, an improvement was anticipated; the lode in the shaft is now 6 ft. wide, without the north wall having been seen, it produces rocks of tinstuff, some of which have weighed 118 lbs., some samples of which have given 15 in 20, but the fair average of the lode, without exaggeration, is about 4 in 20; and should it continue as rich down to the 60 fm. level, which it is expected the shaft will reach in about six weeks, it will be a valuable and a profitable mine.

*PENCRAIG LEAD MINE, NORTH WALES.*—This mine is situated in the rich lead mining district of Llanrwst, in the county of Carnarvon, and has been in operation about nine months—is now about to be commenced in a more spirited manner; and, from the highly-favourable appearance of the lodes at shallow depths, is likely to become (at no distant period) one of the most profitable mining speculations in North Wales. The sett extends over about 200 acres of ground, and is held under a license, subject to a lease for 21 years, from G. Davies, Esq., of Cyffyt, at the usual royalty in Wales, of one-tenth of the dross. Seven distinct veins have been discovered. The operations have hitherto been confined to one of the most promising, having an east and west course, with an inclination of about 2 ft. in a fm. to the north. It has been opened on its course at the surface for about 40 fms. in length, and from 4 fms. to 5 fms. deep, averaging 4 feet in width, being composed of sugary spar and gossan, intermixed with large stones of pure lead ore. A shaft has been commenced on the back of this lode, which is expected to intersect it at a depth of about 25 fms. from the surface. Considering the large quantity of lead ore obtained in this country at shallow depths, together with the very flattering appearances of the lode going down opposite the shaft, there remains but little or no doubt, that many hundreds of tons of lead ore will be raised out of the proposed depth, and that at a trifling expenditure. The other lodes in this sett are partly of the same character as the one described; and one lode in particular has produced between 200 and 300 tons of lead ore, at a depth of only 6 fms.; and when these mines were discontinued (owing to the want of sufficient capital to drive an adit of about 150 fms. in length, which would undermine the old works to the depth of about 30 fms.), some good ore was left at the bottom. They have erected a smith's shop, material house, and other erections are in course of completion. The mines are divided into 1024 shares, and are held by parties residing in the locality. [We have received the above from an esteemed correspondent, who promises further contributions relative to the mines in Carnarvonshire, Flint, Cardigan, and the southern counties of North Wales. We shall be at all times pleased to give publicity to his reports, having a high opinion of the mineral lodes of this important mining field, which we believe, only requires the attention of enterprising capitalists to bring the same to a profitable result. We sincerely wish the adventurers in the above a fulfilment of their most sanguine anticipations.]

*TRELAWN MINE.*—This sett is situated in the parish of St. Columb Minor, and has been partially worked for upwards of four years by the original adventurers; but it appears their operations have been considerably impeded by a system of jobbing in the shares, adopted by some of the holders—a course which they laudably deprecated; but, having released themselves from such parties, are now progressing with the enterprise in a praiseworthy spirit. The position of the mine is in a favourable locality for lead, and the recent discoveries in Trelawne, which is immediately to the east, fully warrant this conclusion. The result of the workings has been the discovery of three lodes, from which lead ores have been discovered and raised; and, acting upon the opinions of two eminent mine agents (James Gripe and James Evans), expressed in the following report, they are now entering high expectations:—"According to your instructions, we have inspected Trelawne Mine, and have to observe, that the adit has been driven southward from its commencement upwards of 100 fms., which has intersected three lodes; the first of these is a caunter lode, bearing north-east and south-west. From this lode good specimens of lead ores have been raised—it's appearance, generally, is of good promise, and the nature of the ground in which the lead is deposited, we consider very congenial for lead. There are two other lodes discovered, bearing east and west—from these also lead has been gotten; the leading parts of the lodes,

and the indications near the surface, are encouraging, and hold out a good hope that they will prove yet more productive in the deeper levels. From the general appearance, we would recommend a further development of the mine, by driving east on the east and west lode, discovered under the town-plate, on the terrace, in order to intersect the large north-east and south-western lode, soon at lane, and to extend the adit level on the counter lode before-mentioned."

### QUOTATIONS OF SHARES—LAMHEROOE MINE.

SIR.—My attention has been directed, by various shareholders in Lamherooe Wheal Maria, to the quotation of 4L 10s. for these shares, in your Journal of 19th December last; which quotation, you will permit me to state, is not only exceedingly erroneous, but was influenced either by a party, who has to deliver shares bought of him at a lower price, or by others, who have no real knowledge of the prices at which these shares are bought and sold. Since the late discovery in the mine—namely, throughout the entire month of December—the price of Lamherooe shares has been steady at 7L (or 7L 10s. with call of 7th Dec., paid by the seller), nor do I know of any transactions under this price during that period. It might be presumptuous on my part, Sir, to offer you advice respecting the course to be pursued by you, in adopting quotations where various interests are concerned; but I think that, when the opportunity is afforded you, of obtaining intelligence from a source which should be, of all others, the best informed on all subjects connected with a mine—namely, the office at which the management is conducted, and which is, therefore, the centre of all details connected with it—you would do well to avail of such intelligence, and thus to give your readers quotations of the true value of the mining property managed in this office.—JAMES CROFTS: King-street, Cheapside, Jan. 1.

[Of course, we must regret the receipt of Mr. Croft's letter—not alone for the inconvenience our quotation has occasioned, but that, notwithstanding the efforts we make to obtain an accurate return of business transacted, we should not be enabled to render our list so perfect or satisfactory as to avoid the necessity of such communications; but, with reference to the case of Lamherooe, we can only observe, that the price complained of was furnished to us by a respectable broker, whose name, as in all similar instances, we are prepared to give. We feel, however, bound to add our conviction, that, from recent and continued improvement, Mr. Croft is perfectly justified in stating the price as above, and which we believe to be that at which shares are now selling.]

*SOUTH AUSTRALIAN MINING INTELLIGENCE.*—The reports from the Burra Burra continue as favourable as ever. Several new lodes of fine promise have been lately discovered. The Princess Royal is now beginning to yield beautiful ore. Numerous lodes have been opened; but the chief workings are at present confined to the 6 ft. lode, which is daily increasing in the produce of splendid ore in great abundance. From the Kapunda the accounts are of the same encouraging character as heretofore—the produce of the ores of high quality continuing ample. The Montacute continues its progress steadily and quietly, while the sections adjoining, belonging to the Adelaide Mining Company, recently acquired, are exhibiting all the rich qualities of the neighbouring mine, and will soon be in full and successful work. At the South Australian Company's mines at Mount Barker, and on those adjoining, belonging to the Parina Mining Company, comprising the range over a rich mineral district of 20,000 acres, in addition to the numerous lodes already open, fresh discoveries continue to be made—affording every reason for the belief that Mount Barker Mines will eventually be second to none within the province. The mines on the special survey at the creek, belonging to the Australian Mining Company of London, have likewise commenced working, and are making most satisfactory progress. The Victoria Gold Mine has again recovered the gold lode, and great results are confidently anticipated as soon as the level at present driving is more advanced. The Greenock Creek reports are equally favourable—the ground is said to be rapidly improving. The Wakefield, from which the numerous indications and surface specimens of fine grey ore have been brought to town, we hear, is likewise more promising. The shaft upon a main lode recently opened is turning out fine ore; and the "horse," which was at one time supposed to have thrown the lode out of this set, has luckily not done so. The special survey at Mount Remarkable is now definitively taken. There has been a good deal of excitement in town, in consequence of its being officially ascertained that the Governor had refused to allow another special survey to be purchased, for which the means had been provided by the enterprising colonists who had discovered it. We believe it is intended to remonstrate with the Governor on the subject. It is reported that the





uncertain vocation. Where is the business or occupation of life that is not more or less speculative? Can the merchant, who ships his goods to distant colonies, calculate to a nicety upon the profit he will make, or even baffle the influences of the market, or of fate, to secure himself from loss, should his goods even arrive at their destination? Can, indeed, any one undertaking, among the thousands that are daily brought forth, and which receive the support of even the most cautious, be reckoned upon with certainty that it shall turn out as desired? We think not; nor can mining pursuits. But, although it has been for years the practice to condemn them as the most hazardous, we uphold that, when legitimately carried out, they are not so uncertain as many suppose. Risks there must be; but a capitalist, who makes careful inquiry before embarking, may, in a great measure, lessen that risk, and, indeed, look with confidence for profitable results.

The *Times* says—"The risk is of that peculiar kind which fascinates more than it deters." This is true; and for this reason it is that we so often find bubble schemes sent forth to the public, under all the plausibility of humbug, holding out prospects, which, if looked into, have no foundation in facts, and end in failure and disappointment. But these surely are not to be taken as the tests of mining adventure? There are mining companies, no doubt, which, like the Jew's razors, are made to sell—but which form the exception, not the rule.

We are led into these remarks from the perusal of an article in the *Times* of Tuesday last. After quoting the dividends paid in the past year, the writer goes on to say—

In quoting the above returns, it is hardly necessary to point out that the 22 mines whose dividends have been enunciated, and whose shares, according to the price-lists are now worth on an average about 700 per cent. premium, are among the chief prizes of mining speculations; and that, when due allowance is made for the blanks, the general result of this species of investment is not disproportionately favourable. Of 129 British mines printed in the price-list, with the amount paid and the last quotations, the average premium does not appear to exceed 11 per cent.; and when we take into account the numerous mines not quoted, owing to their having been abandoned and the outlay totally lost, it will be inferred that the average return on mining speculations are not greater than such as are derived from other and more certain pursuits. Indeed, it may be that they are less, since (with the exception of periods like the present, when almost every branch of business is affected by the absorption of enterprise into a single channel) it is not improbable that capital is more readily attracted to this description of adventure than to any other, the risk being of that peculiar kind which fascinates more than it deters.

The burden of this paragraph is unjust; far be it from us to say, that the *majority* of mines are prizes—but let us look at facts. The *Times* states that the 28 dividend mines given are the chief prizes of mining; and that of 129 British mines quoted in the share list, the average premium does not exceed 11 per cent.: out of these 129—most of them, be it observed, young mines—we find 31 only at a discount. The others are at a premium—many of them as high in proportion as those which pay dividends. Take, for instance, Alfred Consols (discovered about 12 months)—there 3d. paid up, quoted 50d., or 50,000. prem.; Kirkcudbright, cent. per cent. prem.; Barristown, 3d. pd., 3d.; Condor, cent. per cent.; Great Rough Tor, 1d. paid, 25d. per share; Great Michell Consols, 1d. paid, 4d.; Mary Ann, 7d. paid, price 75d., and so on. Again, the *Times* says, "When we take into account the numerous mines not quoted, owing to their having been abandoned, and the outlay totally lost," &c. "Tis true that many mines have been abandoned with great loss, either through poverty or mismanagement, though many of the latter have been taken up by new parties, and made profitable. As, however, the paragraph in the *Times* would lead those unacquainted with the matter to infer, that all the abandoned mines were blanks in the lottery, we feel it our duty to give our readers another "table of facts."

A List of some Mines which have been abandoned, through various causes, with the amount of Profits divided by each.

Name of Mine.	Profits made.
Blinny Down	£100,000
Herland	90,000
Great Town	250,000
Marsden	40,000
Great Wheal Alfred	300,000
Chacewater	100,000
Crimis Consols	250,000
Abraham, Cremer, and Oatfield	150,000
Wheal Chance	150,000
Wheal Musc	100,000
Trevisker	200,000
Wheal Unity and Poldice	250,000
Wheal Vor	200,000
Gunnis Lake	250,000
Cook's Kitchen	300,000
Wheal Spinster	80,000
Wheal Speedwell	60,000
Union Mines	50,000
Total profits	£3,000,000
	Resumed.

We might enumerate many more: we have given, however, 18 abandoned mines—the profits on which (paid to the shareholders) amounted to £3,000,000. This may seem almost incredible—but we give the list from a statistical account, published in the year 1833. Many of these mines were stopped, owing to the want of efficient machinery to work them; and, had the steam-engine been brought to its present perfection during their existence, better results might have been shown. The mode of working mines is also changed: formerly men worked by chance, ignorant alike of geological or metallurgical indications, and wedded to one or two ideas as regarded stratification; now mining is reduced to a science—It is, in fact," as the *Morning Post* lately observed, "no longer the hap-hazard adventure of our forefathers, but matter reduced to so near a certainty, that prudent men invest capital, with a fair prospect of remunerative returns."

There can be no doubt that many mines have been brought forward by interested parties, who have obtained grants of setts, and puffed them off at a premium, and that losses have thus accrued; but capitalists, before embarking in such, should make due inquiries, not only as to the parties themselves, but as to the capabilities and the geological features of the ground. A grand inducement these sett dealers always hold out is, that their mines are near to one which has yielded enormous profits. Many are caught by this—too often—delusive bait: for, granting a new mine may be actually adjoining another which has made 100,000. profit, parties buying upon this, without inquiry, may find at last that it joins it to the north or south, and as lodes run east and west, derives no advantage from its proximity. It is not, as we said before, from such cases as these that legitimate mining is to be judged, any more than that we should condemn all the best-paying railways in England, because so much money was lost—so many parties ruined—by the stag companies of last year.

At the present season it is very general that abstruse questions are laid aside, so that we may enter on the new year with renewed vigour; while the cheerful fireside, and a friendly chat, induce us to recount the extraordinary results arrived at by steam, or other machinery—the toil, fatigue, and danger of the working collier or miner—the vast extent of capital embarked in mining and railway enterprise at home and abroad—the benefits we derive from its expenditure—and last, not least, we hug to ourselves those enterprises, which are conducive to the comforts of those assembled around the yule log, or the coalfire. One and all feel the warmth, not only of the heat emitted from the Christmas hearth, but whose hearts are warm with gratitude to those who find the means of employing the many tens of thousands, who may be said to be dependent on them; while an appeal is made to the kindly sentiments and feelings of those, who have the power of relieving the distresses and wants of their fellow-creatures. Such notion, at least, actuates us, in presenting to our readers, with the first Number of the new year, some few figures appertaining to the steam-engine, arising from inquiries we have instituted, the data being acquired from authentic sources and our own observation; and as we have wiled away an hour or two in making the calculations, and committing them to

paper, we are disposed to express a hope, that they will not be deemed otherwise than meriting attention, while they may tend to interest our readers. The observations, to which we refer, will be found in an accompanying column.

We last week gave a report of the second half-yearly meeting of the proprietors in the General Mining Company for Ireland, which was of a most satisfactory character, as far as relates to the successful development of the mines. At Swansea they had sold 20 tons of copper ore, and at Flint 90 tons of lead ore, and had dressing 90 tons of lead and 35 tons of copper—the lead is from Shalle Mine, and the copper from Lackmore. In despite of the perseverance of the directors for the full development of the mineral wealth of the several adventures, whether from the gloomy state of the money market, or from disinclination on the part of the holders, we know not, but the report states, that out of the 10,000 shares issued, only 3090 had been paid upon; this is really too bad, and these shareholders must be aware that it is morally impossible not only to make a mine pay its way, but even to keep on the works at all, when the raisings of ore are less than the expenses, unless calls are duly paid; and yet in the short space of six months they have returned an amount nearly equal to one-half the paid-up capital of the company, and this is the way their efforts are backed by their brother proprietors! We sincerely trust that, although "they are sanguine that, in their next report, they will be enabled to give substantial proofs that their Irish mining enterprise is capable of being placed on as firm and profitable a basis as any in the sister kingdom," they will teach such parties that they are not to be allowed to hold out, while there are no actual profits being made, and take advantage of future success; but that, in justice to the minority, who have honestly paid their calls, they will immediately adopt legal measures for the recovery of all outstanding claims.

In the MINING JOURNAL, of the 19th ult., we gave a full report of the meeting of the proprietors of the RHYMNEY IRON COMPANY, called to consider the necessity of increasing the capital, for the purpose of relieving the company from the payment of heavy interest on loans, and give full scope to the development of all the advantages of which their property was capable. In our columns of to-day will be found a report of another meeting, held on Wednesday last, to confirm, or otherwise, such resolutions; and it is highly gratifying to observe the perfect harmony and unanimity which prevailed between the directors and the great body of proprietors, and the evident anxiety entertained, and persevering efforts adopted, by the former to further the interests of the company, and place it in that position, which the important property it possesses, and large capital invested, demands. Some legal difficulties having been suggested at the former meeting, as to the power of the company to increase their capital, a case was drawn up and submitted to the ATTORNEY GENERAL, and it will be seen, that the opinion of that learned gentleman is, that they have the power to raise additional capital, either by preference shares, or otherwise; and thus the plan of Mr. COLES CHILD, which has met with the warmest approbation and approval of the body of directors, and nearly every proprietor, will be fully and fairly carried out. The great point of discussion, at the latter meeting, was the repeal of the 13th clause of the deed of settlement, by which the amount of dividend must be regulated by the previous five years' profits—the general feeling being that every year's profits should be divided as they accrue. It will be seen by our report, that there was no opposition to the course suggested—the only point of discussion being the best time for, and manner in which, such repeal or alteration should be carried into effect; and, although there was at first some little difference of opinion as to the time when a meeting should be held for the purpose—the directors naming the middle of February, and the proprietary wishing it to be called as soon as possible,—Ald. THOMPSON, in his usual conciliatory manner, and with well-timed concession, with the other directors, eventually most cordially gave way to the wishes of the majority; and the meeting, for the repeal of the objectionable clause, will be held within a fortnight. We shall thus see the Rhymney Iron Company placed on an entire new footing, and, we sincerely trust, on a firm and permanent basis—developing the mineral wealth which it possesses to its fullest extent, and paying a fair return for the large capital invested.

It being now universally known and acknowledged by engineers, that boiler explosions are generally the result of incrustation from the deposit of calcareous matter, the discovery of Dr. RITTERBANDT, that muriate of ammonia placed in the boiler with the water, prevents incrustation, by converting the carbonate of lime, by double decomposition, into muriate of lime and carbonate of ammonia—is now taking that hold on the public mind which its importance deserves. A fully explanatory article has been published in the *Times*, of the *rationale* of the invention, and also announcing the satisfactory corroborative fact—that the success of the invention has been tested in the boilers of the engine of that paper, and found to be perfect, having been in use more than 12 months, working 17 hours per day. In addition to the gold Isis medal given to Dr. R. by the Society of Arts, we perceive that the Institution of Civil Engineers has just awarded him a Telford medal in silver for the discovery.

In the MINING JOURNAL of the 19th ult., we noticed the unfortunate circumstances in which the family of Mr. J. BUDGE, of Callington, author of the *Miners' Guide*, were placed, by his having necessarily become the inmate of a lunatic asylum, and the consequent deprivation of his aid for their support; and having since received several communications on the subject, we willingly return to it. It is too true, that he had lately indulged in writing articles for the press, in a style which gave great offence to numerous parties, who had previously given him considerable employment in his profession of mine surveyor, and which had thus greatly fallen off; but as the cause of many of his wild assertions is now discovered to have been the silent workings of the first stage of a fearful malady, we sincerely trust it will not be allowed to operate to the prejudice of his wretched family.

The knowledge of their really destitute condition, has induced some benevolent individuals who knew him in better times, to come forward, for the purpose of raising a subscription, and applying it in the most economical and appropriate manner for their relief—feeling that they had some claim on public sympathy, as the author of the *Miners' Guide* did most certainly confer a great benefit on the mining interest when he published his work, there being at the time no standard work of reference on practical mining, sufficiently condensed and explicit for the general use of mine agents; and it is hoped and believed, that many who have profited by it will devote a trifling to the assistance of the family of the author, under the deplorable circumstances in which they are placed. We before stated, that three of the children have been idiotic from their birth; and, we understand, so wretched has lately been the condition of the helpless family, that they had only straw to lie upon. We trust, however, their condition will now be speedily improved, as their cause has been taken up by several influential gentlemen connected with the mining interest of the county.

Mr. JOHN PETERS, the purser of the Callington Mines, has readily undertaken to see to the judicious application of any sums which may be received on their behalf; and we are happy to see that J. and R. TAYLOR, Esqrs., with their usual liberality, Mr. COOM, of Bodmin, and numerous friends, have already begun to send in contributions, which, we trust, will be largely responded to. It is a case, indeed, of real distress; and it cannot fail to bring consolation to those who contribute, to feel that they have been the means of saving a family from utter destitution.

#### CORNISH ENGINES.

The superiority of Cornish engines is so universally admitted, that it requires no remark on their excellence, whether viewed with reference to the power of which they are capable—the economy of first cost—the outlay in their construction—or that observable in the consumption of fuel, and the diminution of wear and tear—the monthly returns of some of the principal engines in the county, which appear from time to time in our columns, at once affording conclusive evidence on the several points; while the manufacture and application of engines and machinery connected therewith, whether as applied to the mines in Cornwall, the drainage of the Lake of Haarlaem, or the supply of water to the great metropolis—and every testify the value attached to the talent of the Cornish engineer; and the superiority of the work turned out by the founder and mechanist. We do not purpose writing an essay on the subject, nor do we intend making comparisons which might be deemed invidious; but, on the present occasion alone, to present to our readers such interesting statistical details, as we have acquired on a personal inspection, within the past few days, of an engine lately constructed by Messrs. SANDY, CARNE, and VIVIAN, of the Copper-house Foundry, Hayle, from the designs, and under the direction of, Mr. WICKSTEAD—such being employed by the Grand Junction Water-Works Company, and erected at their station at Kewbridge. It will, doubtless, be in the recollection of our readers, that we, some few years past, adverted to the application of a Cornish engine at the East London Water-Works, where Mr. WICKSTEAD holds the office of engineer; but the present being the *largest steam-engine ever erected in this kingdom*, we feel assured, that the information we have collated will be read with interest, and, by many, with astonishment at the extraordinary power acquired, and the economy observed. We will, therefore, in the first instance, proceed to give the dimensions of the principal parts of the engine, from which will at once be seen the relative proportions of the gigantic machine; and then consider the immense power which it is capable of applying to the purposes for which it is erected. We may, however, premise these figures, by observing, that the house in which it is placed is 54 ft. in length and 18 ft. wide, forming one room, without a division; the main beam being supported by four handsome Doric columns. The water for supplying the pump is conveyed from a reservoir contiguous to the engine-house, being, by means of adjunctive steam power, raised from the Thames—the water so furnished for the use of the metropolis by these works being filtered ere it passes into the main and tributary pipes. The object of obtaining so vast a power as that acquired by the construction of the present engine, is to force the water up a column above 200 ft. in height, diverging from 15 feet circumference at the base to 9 feet at the top, where it delivers itself into four descending columns or pipes, and from these passes into the mains or feed-pipes, which convey it to the metropolis. These latter columns are 36 inches in circumference, and are capable of yielding a supply of nearly *five million* of gallons of water per 24 hours, according to the work of the engine, as will be hereafter more fully explained; or, say 17,000,000 lbs. in the twelve months. The cylinder is 90 inches in diameter, or in area 4418 square feet. This is enclosed in a cast-iron case, and again encased with Whiting's patent felt of a thickness which is found ample to retain the heat, that would otherwise escape, and is deemed equal to the ordinary use of sawdust, charcoal, or any other appliance. The stroke in the cylinder is 11 feet—there being the like stroke in the pump, which latter is 33 inches in diameter, and the weight of water acting against the pump is about 36 tons, which it lifts 11 feet high every stroke. The engine delivers at the rate of 407 gallons each stroke; or, when working at 8 strokes per minute, it raises 3257 imperial gallons; or, the large quantity of 4,690,080 gallons in 24 hours, equal to a weight of about 21,000 tons, which, as before observed, is carried up the column referred to, to a height of upwards of 200 feet—being sufficient to command the loftiest houses in the metropolis. The beam, which is 40 feet in length, with the gudgeons and connections, weighs about 35 tons, and which is supported on a cast-iron entablature, by four Doric columns of 26 feet height; taking the aggregate weight of the several parts of the engine, including cylinders, beam, &c., exclusive, however, of the boilers, we believe we are not far from the mark, in setting it down at 350 tons; and to give an idea of its immense power and strength, it may be stated, that the strain on the gudgeons, when the steam is admitted on the piston, is full 200 tons. Having given the result of personal observations and inquiries as relates to the engine erected at Kew, we avail ourselves of such further information on so interesting and important a subject, as we have acquired from sources on which the most perfect reliance may be placed. We have already referred to the engine erected some few years since at the East London Water-Works, and now find that Messrs. SANDY, CARNE, and VIVIAN are erecting another engine, from the same designs as those cited in the preceding remarks, under the direction of Mr. T. WICKSTEAD—the only difference being in the size of the pump, which, in this instance, is larger, and will, therefore, force a greater quantity of water when complete, which is expected to be within two or three months—the size of the pump in the instance of the Grand Junction Water-Works, being as 1089 to 1936 in. The size of pump to be here employed is 44 inches diameter, which at eight strokes per minute, will raise 5800 imperial gallons 110 feet high, or 8,352,000 gallons in 24 hours; and supposing it work the whole year round, without ceasing, would alone raise 3,048,580,000 gallons, or 84½ millions of barrels, being equal in weight to 13,600,000 tons, which, if added to that of the Grand Junction Water-Works, would give a total from two Cornish engines of 4,760,000,000 gallons.

To give some further idea of the enormous power of the two engines collectively, we may observe, that, allowing 16 gallons per diem for each individual, the largest pump cited would be sufficient to supply 500,000 of inhabitants, and the other in proportion—or, together, no less than 800,000 inhabitants.

The engines are worked on the Cornish principle of high-pressure steam expansively; and it is expected that the duty done by them will be not only equal, but superior to that of any other engine employed for similar purposes; however, after their having been subjected to a full and fair trial, we doubt not but that Mr. WICKSTEAD will readily report the actual duty, and who must not be committed by any observations which we may have made. In closing our notice of these stupendous erections, we have only to observe, in addition to the magnitude of the power, that the workmanship and finish is equal to any engine constructed in the kingdom, or, at least, that we have ever seen, which, in our category, would include some of the largest and most powerful, whether applied to mining purposes or to steam navigation. Thus, we think it is fairly shown, that the Cornish engine makers, may fairly compete with the London or any other "folk," not only in the quality of the article, and beauty of the workmanship, but in the strength and power of their engines, and more especially the economy in the consumption of fuel.

**THE IRON TRADE.**—Great activity has prevailed during the past two or three weeks, in the iron trade, in South Staffordshire: many large contracts have been taken, and others as extensive are now under consideration: much is said of the unusual scarcity of ironstone, and very high prices are realized—while coals are a still more difficult article to obtain. Notwithstanding this state of things, a great discrepancy exists as to prices; a large Welsh house has tendered to the South Staffordshire Company, to deliver at one of the Grand Junction stations, rails at 10d. 2s. 6d. per ton; while a Staffordshire house has found it to their interest to violate the rates agreed upon at the previous quarterly meeting, and who have supplied rails at 9d. 1s. 6d., and chairs at 6d. 1s. 6d. per ton. Some speculation is entertained as to the decision which will be come to at the ensuing quarterly meeting; but it is generally believed that, notwithstanding the demand for railway iron, which would justify an advance, the masters will not make any addition to present prices. Such a proceeding would probably cause strikes among the workmen and miners, unless increased wages were agreed to; and many of the small manufacturers, who have many contracts on hand, and have for months realized but seriously scanty profits, would most probably be ruined. The advance on rails at the pit's mouth is 1s. per ton. Upon the whole, there appears every probability that the price of iron for the next three months will remain firm; and that, notwithstanding the demand is considerably above the supply, every effort will be made to execute present railway orders at existing rates.

**IRON, HARDWARE, AND METAL TRADES' PENSION SOCIETY.**—We understand that the Right Hon. the Lord Mayor of London, has courteously consented to preside at the next anniversary festival of this society, and that he has fixed Wednesday, the 14th April next, for the occasion. His lordship's patronage of the society is attributable to the influence of Mr. Sheriff KENNEDY, one of its vice-presidents and founders, and a liberal contributor to its funds. It is confidently expected, that the resources of this valuable institution will be materially augmented by the distinguished patronage thus secured, and that the list of its supporters will be graced with the names of many noblemen and gentlemen connected, by property, with the trades referred to. The society commenced its benevolent operations by an election in September last; and, from an announcement in our Journal of last week, it appears that another election for three additional pensioners will take place in March next.

# ATMOSPHERIC RAILWAY GAZETTE.

7

## PROGRESS OF FRENCH MINING INDUSTRY.

[FROM OUR PARIS CORRESPONDENT.]

The Protectionists are exceedingly active in organising their forces in resistance to the Free Traders; and it cannot be denied, that they have obtained much greater success than the Free Traders had believed possible, or, perhaps, even than they themselves had calculated upon. Town after town, and trade after trade, have either declared for them, or contented themselves with demanding a simple revision of the tariffs, without any reference to free trade. At this moment the prospects of the Free Traders are exceedingly gloomy—more gloomy, in fact, than they have ever been. Some of the principal newspapers too, that, in the first enthusiasm for the crusade against monopoly, deemed it prudent to maintain a strict reserve, so as to be able to place themselves on the side of the strongest, have now boldly raised the standard of monopoly, the great popularity that it enjoys being totally unquestionable. I state all this with perfect frankness, though it is anything but agreeable to be compelled to do so. It is right, however, that the truth should be known, and *sous autres* Englishmen prefer the truth, even when it is displeasing, to delusive falsehood. I confess that, for my part, I am not at all surprised at the turn matters have taken in favour of monopoly. The Free Traders committed an egregious blunder at the commencement of their campaign, and that blunder I denounce to you at the time. In consisted in declaring against *all* monopoly and *all* protection, whereby every branch of commerce, every trade, every occupation, that is protected, or believes itself to be protected, jumped to the conclusion that its interests were to be sacrificed, and itself completely ruined. Hence, all persons engaged in all branches of trade, commerce, and occupation, threw themselves immediately into the arms of the Protectionists, and bawled with them that they would not be ruined by the "perfidious" *Anglais*. In vain did the Free Traders represent that if Protection gave them a few francs with one hand, it took double with the other—that if it made each head of their cattle, each yard of their cloth, and their linen, a few sous dearer to the purchaser, it exacted from them 50 fr. or 100 fr. per annum for their coal and their iron—in vain, I say, was this explained—the good people were too prejudiced to listen, too stupid to understand. But if, as the *Mining Journal* suggested, the Free Trade Association had contented itself with combating against *the* giant monopoly—that of iron—it would have enveloped in its ranks every person engaged in commerce and agriculture—every man, woman, and child, in the whole community, from the highest to the lowest; for that odious monopoly weighs upon every trade, and upon all classes of people, without exception. In fact, at one time, the calico, cloth, and linen manufacturers had declared against the ironmasters, in the hope of getting their iron and machines cheaper; but when they heard the Free Traders proclaim that they proposed to do away with protection on cloth, calico, and linen, as well as on iron, they immediately ranged themselves with the ironmasters. The blunder the Free Traders have committed is most extraordinary, inasmuch as a moment's reflection must have convinced them that the very universality of their crusade would raise up a host of enemies; and that, consequently, like prudent generals, it would be wise to attack enemies, and destroy them in detail, instead of allowing them to become united in a phalanx, and organised for the battle.

Nevertheless, notwithstanding this great mistake—notwithstanding all that the ironmasters can do, or induce their tools to do for them, it is impossible to believe that the present monopoly of iron, and I will add, the present duties on coal, can long be endured. They weigh so oppressively on all, and inflict such positive ruin on many, that they must be modified. Even some of the best friends of the ironmasters are beginning to admit this. The newspaper, *La Presse*, for example, which is a thorough-going, hot-headed, brutal protectionist, and with a fierce hater of pernicious Albion, has just declared that the existing tariffs on coal and iron must be cut down. Other Protectionist journals will no doubt soon be constrained to admit the same thing: and accordingly we may hope that the Government will not venture to protect the ironmasters and coalowners any longer, even at the risk of incurring the wrath of the *Moniteur Industriel*.

*Apropos* of this journal, allow me to warn you and your readers not to fall into the error of supposing that it is a very important organ of public opinion. The Protectionists, indeed, have chosen it for their official paper; but that was to save themselves the expense of establishing a new journal, and not at all on account of any influence or circulation that it possessed. You see it nowhere in Paris, neither in *cabinets de lecture*, nor in *cafés*. I have asked for it in a hundred such places, but never could obtain it. Even among people interested in the matters of which it specially treats, it enjoys little or no circulation. For my part, I never by any chance see it, even although, as it appears from your leading articles, it sometimes honours me with its abuse.

It appears that the contracts which the Government of Sardinia desires to be accepted will be for 7619 2-10th tons of rails (of 2000 lbs. each ton), 2839 8-10th tons of chairs, and 217 4-10th tons of bolts, &c. The adjudication of these contracts will take place at Turin, on the 14th January next.

The *Journal des Chemins de Fer* published a royal ordinance, dated October last, authorising the coal companies of Anzin to prolong the railway of Abson to Denain, as far as Somain (a distance of four kilometres), so as to put it into communication with the Northern Railway; but, in case a railway from Somain to Cambrai shall hereafter be conceded, the company is to give it up to the new company, on being paid the cost of formation.

Two workmen were lately killed by an explosion in the coal mines of Douchy. Some of the minor journals are trying to create a great hubbub about the Company Cordier, formed for obtaining the concession of the railway from Creil to St. Quentin. They accuse certain English directors of having consented to amalgamate with Rothschild's company, from improper motives—in plain English, they say they were bribed with 28,000. It seems curious, however, that men should have to be bribed to promote their own interest, for there is no doubt that it would have been contrary to the interest of the company *not* to have made the amalgamation.

In Belgium the current price of rails is 320 fr. (12*l.* 16*s.*) per ton.

On the 30th January next, the Government will receive a contract for the supply of 15,000,000 kil. of English coal for Toulon.

A rich collection of mineral specimens of Algiers has lately arrived in Paris, and is now being arranged for the *École des Mines*. It is expected that it will throw much light on the grand question, as to whether Algiers does, or does not, contain great mineral wealth.

Under date of the 25th, a letter from St. Dizier says—"A bargain for 500,000 kilogrammes of *fonte blanche* has been made at 200 fr., to be taken at the furnace; and another for 900,000 kilogrammes at 195 fr., to be taken also at the furnace. The conveyance to the establishments in which this *fonte* is to be employed, will cost the purchaser 10 fr. to 15 fr. The *fers batus à la houille* remained firm at 400 fr. for Paris, and 410 fr. for St. Dizier, delivered at St. Dizier. The *fers laminés* were delivered there at 390 fr. and 400 fr."

The recently-published returns relative to French commerce contain some valuable figures relative to the merchant marine, which, as was shown in my letter some months ago, suffers cruelly from the existing iron duties. These figures shall be laid before your readers next week. *En attendant*, it may be mentioned, that it appears from the same returns, that, notwithstanding the duty of 25 per cent. on the importation of coal, the value of coal imported last year was 30,000,000 fr., being 17,000,000 fr. more than in 1842, and 12,000,000 fr. more than in 1840. What would it be if the duty were entirely abolished? The abolition of the duty will be a simple act of justice to the ironmasters, whenever their monopoly shall be broken up.

**ROMAN MINING AND IRON FOUNDRY SOCIETY.**—At the present time, when the projected railways in the States of the Church are exciting general attention, as proofs of our internal resources for their formation, may be numbered the two establishments for the manufacture of iron, which, within a very short period, have risen to be unrivalled by any in Italy itself, and to compete in excellence with the most celebrated of other countries. We speak of the establishments of Tivoli and Terni; the one in the neighbourhood of Rome—and with the inexhaustible advantages derived from the waters of the Anio, has already two great machines, besides many other minor ones, for the fabrication of tools for the labours of the field, and instruments of every sort for weaving, of qualities so perfect and so much sought for as to supply not only the entire states of Rome, but also those external. The other establishment, that of Terni, receiving alliment from the river Velino, is a foundry supplied also with the most spacious premises, magazines, habitations for the labourers; machinery the most excellent, the springs and wheels of iron; eight large forges; four great mallets, and two great pumps, with a cylinder of enormous dimensions—as yet the only one in Italy adapted for the fabrication of the rails, the lattices, &c., for railways. Now, these two establishments united together, and working in full activity, might easily fabricate iron, cast, beaten, and wrought cylindrically, to the amount of 12,000,000 lbs. weight per annum. The proprietors of both foundries, knowing from experience how much their interests were to be served by the increase of capital, have determined on forming an anonymous society, which vesting by means of actions the sum of 600,000 scudi, might make itself responsible for the two establishments, amplify the sphere of operations, and carry on the working of the mines this country possesses. Accordingly, was held, on the 15th Nov., the first general assembly of the society, at which about 200 assisted: it was in truth a convention of nobles, proprietors, merchants, and artists, most goodly and honourable—the first occasion, we believe, when it has been shown how ready the Italians are to respond to the appeal of an industrial association in the same degree as they have been to associate themselves for the purposes of benevolence, whenever called to do so. In this assembly were initiated the measures for the direction of the society; a president was elected, the able and scientifically instructed duke, Don Mario Massimo; and two special commissioners were appointed for the revision of the statutes and contracts that have relation to the government, &c., of the body. And thus, within a short time, we shall see it legally constituted, prospering, and maintaining its important post, so as to administer to the necessities of the states, and to undertake the vast works of the railroads to which his Holiness Pius IX. has graciously acceded his protection; as he has also deigned to recognise as worthy, and bestow his approbation upon, the objects of this honourable association.—*Roman Advertiser*.

## Original Correspondence.

### FILLING OF THE BLAST FURNACE.

SIR.—After some months struggle with prejudice, I introduced into a blast furnace, where I am concerned, the following mode of filling. It produced in the yield an immediate change from 14*l.* tons of high blown scrap-iron to 26 tons of Nos. 1 and 2 in successive weeks. The effects were developing with great rapidity, and the make was at the rate of 40 to 50 tons in the beginning of the third week, when the blast pipes were cut down by parties connected in the management to less than half their area. The full effect was destroyed, but sufficient proof of its high value remained as the furnace alternated 28 and 32 tons for some weeks, in place of the former miserable yield, and this saved us from ruin. The style of filling is, to heap the burden circularly round the walls, leaving a centre of bare cokes. The evident principle is a clear, unvarying passage for the blast, concentrating the heat, diminishing action on the sides and lateral radiation. It ensures a regular subsidence, by maintaining a focus of combustion, towards which the materials always tend; while equal heat, at equal distances, ensures just and certain de-oxidation on the radii of that centre. It prevents the uncertain and tubular ascent of blast, by which lateral scaffoldings are caused, as proved by the fact that, 24 hours after it was introduced, the furnace, which previously worked by slips of great depth, ceased from this vice, and drove with the greatest regularity. The same plan of filling is used in the Forest of Dean, at Parkend furnace, where the large weekly quantity of 120 tons, from a moderate-sized furnace, places in a conspicuous light the intelligence of the management. Our ore is peculiar, being for the most part a fine gravel, which, doubtless, impels the blast more than the ordinary ironstone. If your readers can communicate any similar experience, it will be gratifying and valuable. Years since, my father tried, at the Abersychan Iron-Works, an opposite plan—he had the mine discharged on the platform, and then spread evenly over the cokes with shovels, but with no perceptible effect. Our furnace is 8 ft. diameter at top.—DAVID MUSHET, Jun. Dec. 28.

### SIX AND EIGHT-WHEELED ENGINES.

SIR.—In looking over your Journal of the 26th ult., I find something not exactly as it ought to be; and, as your columns are always open for the advocacy of truth, and to correct any misstatements that have arisen from the want of facts, I have taken this opportunity of doing so. In the first place, you speak of the largest and most powerful locomotive engine ever built. We are not in a position to judge, as we are not in possession of either the size of wheel, or length of stroke, nor diameter of cylinder—give us these, and then we will be better able to judge, for we have some large ones at this day. In the next place, you say it is some 20 years since you heard of the first locomotive with six wheels, which fully developed the advantages to be gained by that number. It was made for the spirited directors of the Stockton and Darlington Railway Company—and by whom? Well, by that talented engineer, Mr. Timothy Hackworth, Sölio Works, New Sheldon—to whom we are indebted, too, for some of the most important inventions and improvements in the locomotive steam-engine. You say that you had not heard of any additional wheels being added, except in the American bogie engine. I beg to inform you that, about 28 years since—I speak from memory—the spirited owners of Wylam Colliery, west of Newcastle, made, I believe, three locomotives, with eight wheels of a peculiar construction, and connected, not with side rods, but with toothed wheels—for, perhaps, side rods would not do at that time. These engines answered very well, but were laid aside in consequence of the wheels wearing away so fast; then four-wheeled engines were adopted, and were likely to answer better for the line of railway then in use; and when we take into consideration at what time of the locomotive world they were made, there must have been a great deal of talent displayed, and, if there is any praise due at all, it is due to the owners of Wylam Colliery, or to their engineer that brought it to bear.

I do not wish to discourage any talented engineer from bringing out anything *stupendous*, if it is only a change for the better; but, bear in mind, there are many changes in the present day that are not, but ought to be, improvements. I have made the remarks with a *wish* to put the saddle on the right horse; and, as I always like to see praise administered where praise is due, and with its full force, to give it to the owners of Wylam Colliery, for the first engine with eight wheels, about 1817.

If I am wrong, I wish to be put right by any of your correspondents, and will always feel obliged.—J. P. F. Stockton-on-Tees, Dec. 31.

### METHOD OF WORKING WELSH COAL.

SIR.—"Carbonarius" has hit upon another new mode of obtaining coal from the South Wales coal-field, which he thinks would be far more advantageous than the present—viz.: by sawing it; and the saw he would recommend is the same as is used by the freestone cutters, by two men, one at each end. Now, I should be very glad to be informed, how the man at one end of the saw is to get into the solid coal, to begin the work. We have a vast deal of scientific instruction, or ignorant meddling (call it which you please), from one quarter and another—all of whom seem to jump at the conclusion, that the whole host of us colliers, numerous as we are, not only do not understand our business, but are devoid of common sense. "Carbonarius" calls himself a coalowner—let him establish his new principle, and then he will deserve to be called "top sawyer."

In reply to my observations, "F. B." tells us that I confine myself to figures—viz.: *l. s. d.*—and I assure him that is my usual way of doing business, and believe that all steady miners do the same throughout their general practice; for he may depend upon it that, without the strictest economy in every detail, a coal mine can never be worked to advantage or profit. Writers, who assume too much, are sorry for it when they find their errors corrected; and it appears evident to me that "F. B." is so, from the manner in which he answers my remarks. Now, he says, he *intended* those headings marked cross-headings in figure 2, to be *stall*-headings. I cannot think so; these cross-headings are marked on the plan rather less than 6 ft. in width, a *stall*-heading would be 6 or 7 yards wide, which would take away half of his 14 yards of pillar, which he professes to bring from the top of his work down—therefore, the idea of calling them *stall*-headings is only a shift to cover his errors; why not call them stalls at once, and work 7 yards up and 7 yards back, as is the general practice? No, this would put an end to his new system at once. In another part of his communication, in answer to your other correspondent, he says, he need not drive air-ways across the 14-yard pillars, while driving up 70 yards to the rise in a fiery colliery. I have seen, and see daily, headings going to the rise that cannot be worked safely 15 yards beyond the air-ways; and, if "F. B." will visit Blaenavon, I will readily show them to him. I asked him—I thought very civilly—to describe his plan of carrying horse and air roads in a large colliery, working on the 14 yard pillar system; and his not having done so, makes me think he has no definite plan for those essential parts of working a colliery. I trust "F. B." will reason the matter patiently, and adhere to his No. 2 figure—viz.: the working an acre of coal.—T. DEAKIN: Blaenavon, Dec. 30.

**INSTITUTION OF CIVIL ENGINEERS.**—The address delivered by the president, at the last anniversary meeting of this society, has just reached us; Sir John Rennie, in this document (which is one of the most able ever produced), enters into a comprehensive review of all the subjects brought before the institution during the session, and also presents a perfect historical synopsis of numerous scientific subjects—including railways, steam navigation, propellers, gas, roads, architecture, meteorology, agriculture, mineralogy, geology, &c., &c., but which, from its great length, we shall not be enabled to give entire, but our quotations, from time to time, will be sufficiently ample to lay before our readers all the information in connection with the several subjects to which our Journal is devoted. This able production not only reflects the highest credit on Sir John Rennie, but must greatly enhance the value of the Institution of Civil Engineers in public estimation—as from it will be seen the high character for intelligence and utility it has attained, and the vast benefits that must arise from the collecting and disseminating of so much real value.

**RAILWAY CALLS.**—The amount of calls, payable on English railway stock during January, amounts to 4,399,456*l.*; and on foreign lines, 1,271,000*l.*—one-fourth, or 317,750*l.* of which, it is calculated, will be paid from England: making a total for the month of 4,717,206*l.*

The public debt of the United States on the 1st of December, 1846, including loans, treasury notes, &c., was £24,256,494 60. Since the 4th of March, 1846 £1,680,600 of the principal of the public debt have been paid.

Mr. Holtzapple has had the honour of attending at Windsor Castle on Thursday, and presenting to her Majesty an elaborate specimen of ornamental turning, or mechanical carving, in the form of a watch-stand, in ivory. He had also the honour of presenting to Prince Albert the second volume of his work *On Turning and Mechanical Manipulation*.

## Transactions of Scientific Bodies.

### MEETINGS DURING THE ENSUING WEEK.

Society.	Address.	Day.	Home.
Asiatic	14, Grafton-street	Saturday	2 P.M.
Entomological	17, Old Broad-street	Monday	8 P.M.
Chemical	Society of Arts, Adelphi	Monday	8 P.M.
Pathological	21, Regent-st., Waterloo-pt.	Monday	8 P.M.
Geological	Somerset-house	Wednesday	8 P.M.
Zoological	11, Hanover-square	Thursday	8 P.M.
Royal	Somerset-house	Thursday	8 P.M.
Antiquaries	Somerset-house	Thursday	8 P.M.
Astronomical	Somerset-house	Friday	8 P.M.
Westminster Medical	27, a, Sackville-street	Saturday	8 P.M.

### GEOLOGICAL SOCIETY.

Nov. 18.—The President (Mr. Haanes), in the chair.

A memoir was read on "Laws of Development of Existing Vegetation, and the application of these Laws to certain Geological Problems," by J. Walton, Esq.—with a supplement, by the same author, on "Internal Heat, the Sun's Heat, and Certain Developments of Exogenous Plants."

A paper was then read on the "Geology of the Island of Samos" by Lieut. Spratt, R.N. The island is divided into two equal parts, by a high mountain of crystalline limestone overlying mica schists. There is also another similarly formed, but more lofty mountain, at the western extremity. These mountains are connected by a series of flat-topped ridges, from 400 ft. to 800 ft. high, formed of fresh-water deposits, identical with those in the Gulf of Smyrna, but here of great thickness, exceeding indeed 1000 ft. The beds consist of a compact limestone, with marl in the upper portions, and they contain vegetable impressions and *Planorbis*, *Paludina*, &c.—all, however, very rare. They are, considered, eocene. A formation probably marine, but not containing fossils, reposes horizontally on the lower beds of the fresh-water series. This formation probably corresponds with one elsewhere met with in the same region, and belonging to a newer part of the tertiary period.

A paper by the same author was next read on the "Geology of a part of Eubœa and Boeotia." On the east shore of Eubœa, and in the interior, are lacustrine deposits, identical with those at Samos, Smyrna, &c., considered to be of the eocene period, containing numerous vegetable impressions and much lignite, in numerous workable beds. A considerable quantity of gravel reposes on the lower beds, and appears at the surface, but its age is not determined. These lacustrine deposits, with lignite overlaid by gravel, are repeated throughout a great part of the district described by the author. In conclusion, the author expresses his opinion that, during the eocene period, there were no marine deposits in the south-eastern part of Europe, but that there existed at that time a considerable lake of fresh-water in what is now the eastern part of the Mediterranean. At the close of the period the lake probably became converted into an arm of the sea, and this change was most likely accompanied by great subterranean disturbance.

A note on the Fossils collected by Lieut. Spratt, was next read by Prof. E. Forbes. The comparison of the beds at Samos with those of the Gulf of Smyrna, was confirmed by the evidence of the few fossils obtained. The fossils from Orissa were also eocene, but those from Koumi exhibit a much more recent character.

[The delay in the publication of the above rests with the officers of the society, and not with us: we cannot help thinking that some different arrangement might be made, than to allow a delay of five weeks to take place in forwarding a mere abstract of the "Transactions of the Society."]

### SOCIETY OF ARTS.

Dec. 23.—W. H. BODKIN, Esq., M.P., in the chair.

T. R. HARRISON, J. WILKS, G. A. DEAN, and T. DEAN, Es

# THE MINING JOURNAL, AND ATMOSPHERIC RAILWAY GAZETTE.

## Proceedings of Public Companies.

### MEETINGS DURING THE ENSUING WEEK.

**MONDAY** ..... Trodigh Consols Mining Company—offices, at Eleven for Twelve. Derbyshire, Staffordshire, & Worcester Junction Railway—offices, Eleven.  
**TUESDAY** ..... Madrid and Valencia Railway—London Tavern, at Twelve.  
**WEDNESDAY** ..... Royal Santiago Mining Company—office, at One.  
 Wheal Trevana Mining Company—Fountain Inn, Liskeard, at Two.  
**THURSDAY** ..... Mining Company of Ireland—office, Dublin, at Twelve.  
 Ely and Huntingdon Railway—offices, at Eleven.  
 Rosshire Pier and Botanical Garden Company—Adelaide Hotel, London-bride, at One.  
 Lambridge Mining Company—offices, at Two.  
 United Hills Mining Company—offices, at One.  
 Worcester, Warwick, and Rugby Railway—London Tavern, at One.  
**FRIDAY** ..... Commercial Dock Company—offices, at One.

[The meetings of Mining Companies are inserted among the Mining Intelligence.]

### RHYMEY IRON COMPANY.

A special general meeting of the proprietors in this company was held at the London Tavern, Bishopsgate-street, on Wednesday last, the 30th inst.

THOMAS WILSON, Esq., in the chair.

Mr. SCUDAMORE (the secretary) having read the advertisement convening the meeting, read the resolutions passed at the meeting of the 16th inst. (which will be found in the *Mining Journal* of 19th ult.), with this addition—viz.: “It appearing from the result of a consultation with the Attorney General, that the issue of notes at a higher rate of interest than 5 per cent., whether as interest or bonus (being for a longer period than 12 months), would render the issuer and holders thereof liable to the penalties attaching to the Usury Laws; it then became necessary to consider the possibility of issuing new shares; and we are happy to report to the meeting that the Attorney General is of opinion that, by the deed of settlement, there is authority enabling the company to avail themselves of that resource, whether as preference shares, or otherwise; and that the dates for payment of the instalments, provided for, in clause 2, be as follows—viz.: Secondly, the said 9*l*. per share to be paid by instalments at the following periods—1*l*. per share the 1st of February, 1847; 3*l*. per share 19th of June, 1847; and 2*l*. per share 20th of January, 1848 = 9*l*.”

The CHAIRMAN then said, that the resolution he had to propose was—“That the resolutions now read be confirmed, and that the directors be authorised to carry the same into effect.”—A PROPRIETOR wished to know, before the resolution was put to the meeting, whether there was a clause in the deed which compelled them to take an average of five years’ profits for the amount of dividend to be declared; and whether, if so, they had the power to alter the rules and regulations of the company?—Mr. THOMAS SMITH, of Ramsbury, observed that there certainly was such clause, and which it was wished should be repealed, and there was no doubt of their power to alter rules, but for which there must be two special meetings.—Mr. WHEELER asked, would the directors call a special meeting for the purpose?

The CHAIRMAN said, the directors would most certainly do their duty to their co-proprietors; there was but one line to pursue—it only rested with the proprietors—let a requisition, signed by 20 shareholders, to call the desired meeting be sent to the directors, and they would do so about the middle of February; he wished to do one thing at a time; they had come to-day to confirm the resolutions passed at the last meeting, and he thought they should decide upon that subject first.—After some further conversation, the resolution, having been seconded by S. J. CAPPER, Esq., was put to the meeting, and carried unanimously.

Mr. COLES CHILD then rose to address the meeting on the repeal of the 13th clause of the deed of settlement, which confines the directors to declare dividends, only in proportion to the average of the previous five years’ profits; he said that the plan proposed for raising the additional capital, and freeing the company from their present position, emanated from him, and he believed it an honest and fair one to all parties; he knew no companies who paid dividends on an average of five years’ profits.

The CHAIRMAN here interposed, and observed, that he thought such observations exceedingly premature; Mr. Coles Child had been invited to attend the committee-room, to have the subject amply discussed, and he considered such course would be far better than considering it at this meeting, called specially for another purpose.

Mr. ALDERMAN THOMPSON thought it most essential that the clause should be altered; and he also thought that Mr. Coles Child’s, as well as his own, views, would be met by a requisition for a meeting for the purpose being drawn up on the subject in the room, and, if such was done, he would most willingly give it his signature.

Mr. COLES CHILD proceeded to show the comparative merits of the profits being divided upon an average of five years, and annually; and in forcible terms supported the latter system, as best calculated to give satisfaction to the proprietors generally, and to advance the welfare and prosperity of the company. He then read the requisition which he had prepared, to the following effect—“That we, the undersigned, shareholders in the Rhymney Iron Company, do request the directors to call a meeting at the earliest possible period for repealing the 13th clause of the deed of settlement.”

A very long and desultory conversation ensued, upon the wording of the resolution, as to whether it should embrace a consideration of the entire deed, or be confined to the 13th clause only, which immediately bore on the division of profits.—Mr. ROUGEMONT would divide the whole profits of each year: he thought, if such was not the case, they had, during the agitation of the present question, spent their time for nothing.—Some voices were heard in the room, that they would not take their proportion of shares, until the offensive clause was repealed! and Mr. RUSSELL rose and questioned the power of the company to increase their capital, or alter their deed.—The opinion of the Attorney General, as stated above, was drawn to his attention; and the CHAIRMAN said, that the deed was drawn by Mr. OLIVERSON, a most shrewd and clear-sighted lawyer, his partner, Mr. LAVIE, and the conveyancer; and he considered, under such opinions, every proprietor ought to be satisfied; and Mr. ROUSAZZI then said—“If Mr. Oliverson would say they had the power, he should be satisfied.”—Alderman THOMPSON saw no reason why the meeting should not be called in a fortnight. If the clause was not repealed, there was no inducement to the shareholders to take their proportion of the new shares: he thought there might be inconvenience in deciding to divide the *whole* of the profits every year; whether they should do so or no, had much better be decided at a general meeting. He thought it but right, just, and fair, to call the meeting as soon as possible—as the shares must be applied for before the 9th of January, and paid for by the 1st of February.—Mr. CAPPER said, ‘the only object of the directors was the interests of the company: he feared, if the whole deed was to be reconsidered, more time would be required, or they would get deeper into error. If, however, the 13th clause only would be the subject of a special meeting, 14 days would be ample.

After some conversation between the chairman, Messrs. Smith, Coles Child, Wheeler, Russell, Wilson, Capper, and other gentlemen, a requisition was drawn up, requesting the directors to call a meeting, to consider the propriety of altering or repealing the 13th clause of the deed of settlement,—and it was understood that such meeting would take place within 14 days. The chairman stated that notice should be given in good time; and thanks having been voted to that gentleman, and the directors, the meeting separated.

**THE IRON TRADE.**—The *Union* gives semi-official notice that no increase of the duties on iron will be allowed to pass the present Congress. It calculates that the annual production of pig-iron in England is 1,500,000 tons. The railroads now in contemplation, and to be completed in England alone, will comprise 7494 miles; required for railroad purposes in France, 620 miles; in Prussia, 2200 miles; in India, 2000 miles; amounting, in the whole, to 12,314 miles of railroad, which must be supplied mainly from England. It is estimated that it requires 500 tons of iron for every mile of railroad; so that, to supply the demand to complete the roads mentioned, there will be wanting 6,157,000 tons of iron. Can England meet this demand? To meet the demand of England alone, she must supply, without affording a pound to the continent or India, 3,746,000 tons. Recollect that her annual product is only 1,500,000 tons; and she must produce 4,657,000 tons more than the usual annual production to meet the demand.

**CONTRACTS—GREAT NORTHERN.**—The Colebrook Dale Company, and the firm of Bailey brothers, have taken the contract for 35,000 tons of rails, at 10*l*. per ton, 72 lb. rails.

**CONTRACTS—SHREWSBURY AND BIRMINGHAM RAILWAY.**—The directors met at the Swan, Wolverhampton, on Tuesday, to receive contracts for the earth-works, viaducts, tunnels, &c., on a distance of 7½ miles of their railway at Shifnal, in the parish of Wellington. There were a good number of tenders delivered, and that of Mr. M’Leod, of Gloucester, was accepted. The terms are considerably below the Parliamentary estimate.

**FURNESS RAILWAY.**—Contracts for the construction of this line, from the present station at Sandaide, in Kirby Ireleth, to Broughton, three miles and a half, and for the building of two bridges, are under consideration.

**NEWCASTLE AND BERWICK RAILWAY.**—The opening is likely to be postponed until the month of April.

The Midland Company are about to remodel the old Leicester and Swannington line, by—1st, the formation of the line from Burton-upon-Trent to Moira, including the Swadlincote branch, a length of 8½ miles; and 2nd, by widening of the line from the 14th to the 8th mile on the existing line, including the formation of two miles of new line for the alteration of the Bagworth incline. This is one of the oldest lines, incorporated in 1830, and constructed by George Stephenson. It connects the coal-fields near Ashby with Leicester, and is principally, though also a passenger line, used by the collieries and quarries. It was opened in 1834, and only cost 800*l*. per mile.

**CORNWALL LINE.**—The expenses of this line in contesting with its rival, the Cornwall and Devon Central, whose outlay in the same species of litigation could not have been much less, amounted to upwards of 50,000*l*.

**METROPOLITAN IRON AND STEEL COMPANY.**—We have, in a former Number, adverted to the establishment of this company, for the manufacture of iron and steel of a superior quality, from scrap, broken cast, and other description of refuse iron, in London; and we have now before us a new prospectus with the directors’ and other official names attached. The object of the company is to establish improved furnaces in London; and it is stated, that they can compete with the makers in the iron districts, from having the raw material on the spot, and London offering ample markets—while the iron districts have to transmit a bulky commodity hundreds of miles at heavy cost for carriage—and that the difference in the price of coals in London still leaves a large balance in their favour; that iron and steel are vastly more ductile when manufactured from scrap and old iron, than when produced in the usual way; and that good merchantable iron may be produced from the most inferior scrap or refuse, of which London and its suburbs can furnish a very large supply. Taking all into consideration, the promoters consider it a highly desirable speculation, and one which will pay a large return for the capital invested. Without here entering into the details of the manufacture, we would state that the directors deprecate the idea of the plan being in the least speculative or uncertain in its results; but that it has been practically carried out, and is based on the most sure and solid foundation. The capital is 200,000*l*, in 20,000 shares, of 10*l*. each.

**SOUTH DEVON RAILWAY—OPENING TO NEWTON.**—On Monday, the Government Inspector, Capt. Coddington, accompanied by Mr. Brunel and Mr. Harrison, the engineers, inspected this line as far as Newton, to which point it was opened on Thursday. Capt. Coddington expressed himself highly satisfied with the state of the works. The line would have been opened on the 22d, had not the unfavourable state of the weather, during the past month, retarded the progress of the works.

**TUNBRIDGE AND HASTINGS RAILWAY.**—The South Eastern are about to contract for the nine miles of their Tunbridge Wells and Hastings line, from the Wells to Withyden-bride.

**STOCKTON AND HARTLEPOOL RAILWAY.**—This, the connecting link authorised by Parliament last session, for the Leeds and Thirsk, with the port of Hartlepool, is likely to become merged by the amalgamation with the Leeds and Thirsk, should there be no objection to the junction.

**WEST FLANDERS RAILWAY.**—Another 20 miles of this line of railway, making a total of 32, are expected to be opened by spring.

**OPENING OF THE BERLIN AND HAMBURG LINE.**—This railway was opened for traffic in its full length on the 15th ult.

**STEAM TO INDIA VIA EGYPT, MALTA, ITALY, ALEXANDRIA, AND THE PENINSULAR PORTS.**

**PASSAGE TO BOMBAY, MADRAS, AND CALCUTTA.**

The Peninsular and Oriental Steam Navigation Company BOOK PASSENGERS for CEYLON, MADRAS, and CALCUTTA direct, by steamers leaving Southampton on the 20th, and for Alexandria, en route to Bombay, on the 1st of every month.

A steamer from Southampton leaves the 1st and 20th of every month for Malta, whence are steamers to Naples, Genoa, Civitavecchia, three times a month.

**STEAM TO CORUNNA, OPORTO, VIGO, LISBON, CADIZ, AND GIBRALTAR.**

A steamer leaves Southampton on the 7th, 17th, and 27th of every month.

Apply at the Peninsular and Oriental Steam Navigation Company’s offices, 51, St. Mary Axe, London, where only passages can be secured throughout.

**BELGIAN RAILWAYS—AMALGAMATION.**—SHARE-HOLDERS in the Great Luxembourg, Louvain à la Sambre, Belgian Eastern Junction, Namur and Liege, and Sambre and Meuse Companies, are INVITED TO ATTEND A PUBLIC MEETING, which will be held at the London Tavern, Bishopsgate-street, on Saturday, the 16th January, 1847, at Twelve for One o’clock precisely, to consider the propriety ofconcerting measures, with a view to effecting such an amalgamation of the interests of the above-named companies, or some of them, as may secure to the proprietors, the earliest and most economical realisation of the anticipated results. In the mean time communications on the subject may be addressed to Messrs. Tilson, Squance, Clark and Morice, 39, Coleman-street, December 29, 1846.

By order of the directors.

J. BUTLER WILLIAMS, Secretary.

Caledonian Railway Office, 122, Princes-street, Edinburgh, Dec. 21, 1846.

**CLARENCE RAILWAY.**—Notice is hereby given, that the HALF-YEAR’S DIVIDEND, due 1st of January, 1847, on the second-class pre-ferential shares, at the rate of 5 per cent. per annum, will be PAYABLE at the company’s office, 80, Old Broad-street, London, and on after Friday, the 1st of January, 1847.

By order of the committee of management.

CHARLES BENSON, Secretary.

Dec. 29, 1846.

**SLIGO AND SHANNON RAILWAY—REGISTRATION OF SHARES.**—NOTICE.—ALL PERSONS holding SCRIP CERTIFICATES FOR SHARES in this undertaking, are required to TRANSMIT the same forthwith, to the secretary, for registration, with their names, residences, and description, distinctly written thereon; and the directors hereby give Notice, that all shares not claimed on or before the 22d day of January next, will be registered in the names of the subscribers to the deed, in order to complete the registry, after which the scrip will be exchanged for certificates under the seal of the company.

By order of the board.

A. GOLE, Secretary.

Winchester-house, Old Broad-street, London, Dec. 21, 1846.

**WEST FLANDERS RAILWAYS COMPANY.**—Notice is

hereby given, that INTEREST, at the rate of 3 per cent. per annum, on the paid-up capital in this undertaking, for the half-year ending the 31st day of December, 1846,

will be PAYABLE at the offices of the company on or after Friday, the 1st of January, 1847.

It is necessary that the certificates for shares, “To Bearer,” should be left at the office three clear days; and, when called for, a warrant for the amount of interest will be given.

WILLIAM JESSE, Secretary.

11, King William-street, Mansion-house, Dec. 23, 1846.

**INCROSTATION IN STEAM-BOILERS.**—The proprietors

of Dr. RITTERBANDT’S PATENT for the PREVENTION OF INCROSTATION in STEAM-BOILERS are prepared to GRANT LICENCES for the use of the same; they

may also be treated with for the purchase of licences for the sole use of the invention in extensive districts. The perfect success of the process may be ascertained by reference to the *Times* of Dec. 23, and full particulars may be had by application to the secretary, W. A. D’AREY, Esq., at the offices, 9, King William-street, Strand.—Country agents are wanted.—N.B. The proprietors will not guarantee the success of the process unless the material has been purchased of their authorised agent; and the public are CAUTIONED against using Dr. Ritterbandt’s process without being duly licensed.

11, King William-street, Mansion-house, Dec. 23, 1846.

**IMPORTANT TO ENGINEERS, MANUFACTURERS, RAILWAY AND STEAM-BOAT COMPANIES.**

Mrs. W. & C. MATHER beg to call the attention of the ABOVE PARTIES to their IMPROVED PATENT ELASTIC METALLIC PISTONS.

The PRINCIPAL FEATURES and ADVANTAGE of THIS IMPROVEMENT is—

1. It gives GREAT ELASTICITY and SELF-ADJUSTING PROPERTIES, which enable it to yield to any inaccuracy of the cylinder, whether oval or taper, and to move with the least possible friction.

2. It is extreme SIMPLICITY and LIGHTNESS, consisting of only two pieces of metal, having the vertical and lateral pressure in due and proper proportion, independent of each other.

3. It takes the LEAST possible SPACE, and is well adapted for air and water-pumps, as it allows of a larger water way.

Mrs. W. & C. MATHER feel confident that it is the BEST ELASTIC METALLIC PACKING yet known, for the above reasons.

Models may be seen at the Salford Iron-Works, Manchester; at W. Barker’s, engineer Newton-Moor; and also at J. Mather’s, engineer, Beaumont-street, Chelsea, London.

**STEAM COAL—WITHOUT SMOKE,** as per experiments made at her Majesty’s Dockyard, Woolwich.

CAMERON’S COALBROOK STEAM COAL, AND SWANSEA AND LOUGHOR RAILWAY COMPANY.—(Completely Registered and Incorporated.)

OFFICES—2, MOORGATE-STREET, LONDON.

The directors are now prepared to supply steam ship companies, manufacturers, shippers, and others, with the company’s steam coal, either at the company’s wharf at Swansea, or in London. A statement, showing by comparative trial the superiority of this coal for steam purposes over every other, and a scale of prices, may be had on application at the company’s offices here, or at their wharf at Swansea.—March 18, 1846.

**PATENT GALVANISED IRON WIRE ROPE WORKS**

MILLWALL, POPLAR.

ANDREW SMITH begs to inform the Mining, Railway, and Shipping interests, that he

has obtained a PATENT for an IMPROVED METHOD of GALVANISING IRON, producing a much superior article at a considerable saving in cost—the improved process for galvanising wire rope, adding only 2*l*. per ton instead of 2*l*. under the ordinary processes. The rope is extensively used in damp situations, for mining and railway purposes, and for ships’ standing rigging.

59

**NOTICE TO THE MANAGERS OF MINING COMPANIES.**

SMELTING WORKS, &c.

Mr. MITCHELL (late Mitchell and Field) begs to announce, that ASSAYS and

ANALYSES of all descriptions of ORES, MINERALS, and FURNACE PRODUCTS, are

conducted at his LABORATORY, 22, HAWLEY-ROAD, KENTISH TOWN, to which

direction all communications are to be addressed.